

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE


# JOHN MUIR MEDICAL CENTER CAMPUS MASTER PLAN APPLICATION

Wagstaff and Associates  
Urban and Environmental Planners  
April 1996

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# ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED JOHN MUIR MEDICAL CENTER MASTER PLAN

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April 1996





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## I. INTRODUCTION



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## I. INTRODUCTION

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### A. EIR PURPOSE AND INTENDED USE

This environmental impact report (EIR) describes the environmental implications of the John Muir Medical Center (JMMC) Master Plan project, a 20-year plan to allow up to an 833,000 square foot expansion of the existing John Muir Medical Center in Walnut Creek. The expansion activities would take place on the existing medical center site near Ygnacio Valley Road and on two nearby properties. As used in this EIR, the terms "JMMC Master Plan," "Master Plan," and "project" refer to all aspects of the current Master Plan proposal, including all necessary local, state and federal approvals, entitlements, and permits that may be required for development of the proposed project (Design Review Commission (DRC) approvals, Walnut Creek General Plan amendments, specific plan amendments, rezoning/prezoning, development agreement, annexation, required state approvals, etc.).

The city of Walnut Creek is the Lead Agency<sup>1</sup> for all environmental documentation and procedural requirements for the JMMC Master Plan project. This EIR has been prepared by the city of Walnut Creek in keeping with state requirements set forth in the California Environmental Quality Act (CEQA). More specifically, this report has been prepared as a "project EIR" pursuant to CEQA Guidelines section 15161. The report is intended to inform city decision-makers, other responsible agencies, and the general public of the proposed project and of the environmental consequences of its approval.

CEQA Guidelines stipulate that an EIR is intended to serve as a public information and disclosure document identifying those environmental impacts associated with the proposed project that are expected to be significant, and describing mitigation measures and alternatives which could minimize or eliminate these significant adverse impacts.<sup>2</sup> Such impacts and mitigation needs are discussed in this EIR to the level of detail necessary to allow reasoned decisions about the project and warranted conditions of project approval. The report also describes and evaluates a range of reasonable alternatives to the proposed project.

This EIR has been prepared to serve as the CEQA-required environmental documentation for city consideration of this project, including the general plan amendments and zoning change,

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<sup>1</sup>CEQA Guidelines define the "Lead Agency" as the public agency that has the principal responsibility for carrying out or approving a project.

<sup>2</sup>CEQA Guidelines section 15149(b).



specific plan amendments, preliminary DRB approval, as well as subsequent DRB approvals, grading permit approvals, building permit approvals, and other city actions necessary to implement the project. As a result of the information in this EIR, the city may act to approve or deny these various actions, and to establish any associated requirements or conditions on project design, construction, and operation that it deems warranted in order to mitigate identified project impacts on the environment.

As the Lead Agency, the city also intends for this EIR to serve as the CEQA-required environmental documentation for consideration of this project by other Responsible Agencies<sup>1</sup> and Trustee Agencies<sup>2</sup> including, but not limited to, the East Bay Regional Parks District, Contra Costa County Local Agency Formation Commission (LAFCO), the Bay Area Air Quality Management District, the State of California Joint Commission on Accreditation of Hospitals, and other reviewing state agencies and offices (see section III.E of this EIR, Required Project Approvals).

## **B. EIR SCOPE--SIGNIFICANT ISSUES AND CONCERNS**

As provided for in the state CEQA Guidelines, the scope of this EIR includes all environmental issues to be resolved and all areas of controversy known to the Lead Agency (the city), including those issues and concerns identified as possibly significant by the city in its preliminary environmental review (Initial Study<sup>3</sup>) of the project; by other agencies, organizations, and individuals in response to the city's Notice of Preparation<sup>4</sup> (dated July 17, 1995); and by the attendees of the public scoping meeting held by the city on October 23, 1995 to discuss the EIR scope. These areas of controversy and environmental issues to be resolved are listed below.

1. The **land use** implications of the project including its compatibility with surrounding existing land uses, its effects in displacing or partially displacing some existing land uses, and its relationships to adopted city land use goals, policies, and regulations;

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<sup>1</sup>Under CEQA Guidelines, the term "Responsible Agency" includes all public agencies, other than the Lead Agency, which have discretionary approval power over aspects of the project for which the Lead Agency has prepared an EIR.

<sup>2</sup>Under CEQA Guidelines, the term "Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by the project which are held in trust by the people of California.

<sup>3</sup>The city's Initial Study for the JMMC Master Plan project is included in Appendix A of this EIR.

<sup>4</sup>The Notice of Preparation (NOP) is a CEQA-required brief notice sent by the Lead Agency to notify the Responsible Agencies, Trustee Agencies, and potentially involved federal agencies that the Lead Agency plans to prepare an EIR for the project, and solicits guidance regarding EIR scope and content. The city's NOP for the JMMC Master Plan project is included in Appendix A of this EIR.

2. The **urban design and visual impacts** of the project, including the various proposed Master Plan "development units," associated building envelope limitations and other development standards, on adjacent residential, institutional, and office uses; and on the greater Ygnacio Valley Road/La Casa Via environs;
3. The **transportation** impacts of the project, including anticipated effects of the various Master Plan proposed development phases on: (a) daily and peak hour vehicular traffic volumes; (b) the resultant operation and safety of the local system of arterials, streets, and controlling intersections; (c) local transit, pedestrian, and bicycle access needs; and (d) local parking demands;
4. The potential **employment and housing** impacts of the project;
5. The **public facilities and services** impacts of the project, including its incremental effects on local fire and police protection needs, special wastewater service needs, water service and supply, parks and recreation, and solid waste management needs;
6. The **noise and vibration** implications of the project, including construction-period noise and vibration impacts on existing medical facilities and adjacent uses; the impacts of possible future changes in helicopter traffic; noise intrusion impacts on the project itself from future vehicular traffic on Ygnacio Valley Road; and the effects of noise generated by medical facility operations on residences and businesses in the area;
7. The **health and safety** implications of the project, including potential impacts related to the use, handling, storage, and disposal of hazardous materials and medical waste;
8. The **geotechnical** implications of the project, including the potential impacts of existing hillside stability conditions, local ground shaking potential, and the likely stability and operability of the facility in the event of a major earthquake;
9. The **storm drainage and water quality** implications of the proposed Master Plan, including its effects on the city storm drainage system;
10. The local and regional **air quality implications** of the project, including the potential effects of increased automobile emissions, possible emission of toxic or odorous substances, and any short-term construction related emissions, with emphasis on identification of fundamental mitigation approaches that can be incorporated into the Master Plan;
11. The **vegetation and wildlife** impacts of the project, including possible effects on existing habitat values within the currently undeveloped portions of the Master Plan area; and
12. Possible project impacts on **cultural resources**, including the potential for discovery of cultural resources during excavation and potential effects on any significant archaeological sites that may exist in the area.

In addition to these twelve **environmental** (CEQA) issues, the EIR also includes in Appendix B a discussion and estimate of the potential **market** impacts of the Master Plan medical office component on the occupancy and viability of existing nearby medical office development (the La Casa Via or "Shell Ridge" medical office properties).

## C. SIGNIFICANCE OF IMPACTS

This EIR identifies those adverse project environmental impacts which are expected to be "significant," and corresponding mitigation measures warranted to eliminate or reduce those impacts to less than significant levels. Where it has been determined that a particular impact cannot be mitigated to a level of insignificance, the EIR identifies that impact as "unavoidable." Section VII.C of the EIR, Unavoidable and Irreversible Adverse Effects, includes a summary list of all significant project impacts identified as "unavoidable." All other identified environmental impacts identified as "significant," but not listed in section VII.C as "unavoidable," have been determined to be capable of mitigation to a point of insignificance by implementation of the associated mitigation measure or measures identified in this EIR.

## D. REPORT ORGANIZATION AND CONTENT

The impact and mitigation information in this EIR is generally organized under the headings of twelve environmental issues listed above (land use, visual and urban design factors, transportation and parking, employment and housing, public services, noise and vibration, etc.). The report describes the following in Chapter IV for each of these issues:

1. The environmental **setting**;
2. The anticipated **impacts** of the proposed project; and
3. The **mitigation measures** recommended to limit, rectify, reduce, or eliminate anticipated significant adverse impacts.

In addition, this report includes a chapter describing project consistency with adopted **local and regional plans**; a section describing and evaluating various **alternatives to the proposed project**; a section summarizing the EIR information in terms of various **CEQA-required assessment considerations** (including project growth-inducing effects, unavoidable adverse effects, irreversible environmental changes, and "effects found not to be significant"); and a chapter outlining the city's **mitigation monitoring** intentions in keeping with State AB 3180.



## **DEFINITIONS OF KEY EIR TERMINOLOGY**

### **Significant/Potentially Significant Impact**

"Significant effect on the environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, flora, fauna, ambient noise, and objects of historic and aesthetic significance. (CEQA Guidelines, section 15382.) "An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant." (CEQA Guidelines, section 15382.)

### **Significant Cumulative Impact**

"Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, section 15355.)

### **Unavoidable Significant Impact**

"Unavoidable significant impacts are defined as those significant adverse environmental impacts for which either no mitigation or only partial mitigation is feasible. If the project is to be approved without imposing an alternative design, the Lead Agency (the city) must include in the record of the project approval a written statement of the specific reasons to support its action--i.e., a "statement of overriding considerations." (CEQA Guidelines, sections 15126b and 15093b.)

### **Significance Criteria**

The criteria used in this EIR to determine whether an impact is or is not "*significant*" are based on (a) CEQA-stipulated "mandatory findings of significance"--i.e., where any of the specific conditions occur which the Legislature and the Secretary of Resources have determined to constitute a potentially significant effect on the environment, which are listed in CEQA section 15065; (b) the specific criteria listed in Appendix G of the CEQA Guidelines that the Resources Agency has determined are "normally" considered to constitute a "significant effect on the environment;" (c) the relationship of the project effect to the adopted policies, ordinances and standards of the city and of responsible agencies; and/or (d) commonly accepted practice and the professional judgment of the EIR authors and city staff.

### **Mitigation Measures**

For each significant impact, the EIR must identify a specific "mitigation" measure or set of measures capable of "(a) *avoiding the impact altogether by not taking a certain action or parts of an action*; (b) *minimizing impacts by limiting the degree or magnitude of the action and its implementation*; (c) *rectifying the impact by repairing, rehabilitating, or restoring the impacted environment*; (d) *reducing or eliminating the impact over time by preservation or maintenance operations during the life of the action*; or (e) *compensating for the impact by replacing or providing substitute resources or environments.*" (CEQA Guidelines, section 15370.)

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SOURCE: Wagstaff and Associates, 1995.



## II. SUMMARY





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## II. SUMMARY

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This EIR chapter includes a summary description of the proposed action (the John Muir Medical Center Master Plan), a list of the city-identified areas of environmental controversy and issues to be resolved, a summary of each identified significant impact and associated mitigation measures and responsibilities, a summary of identified project alternatives, and a summary of anticipated mitigation implementation procedures.

*This summary should not be relied upon for a thorough understanding of the details of the project, its individual impacts, related mitigation needs, and alternatives. Please refer to Chapter III for a complete description of the project, Chapter IV for a complete description of project impacts and associated mitigation measures, and Chapter VI for a complete evaluation of alternatives to the project.*

### A. PROPOSED PROJECT

The existing John Muir Medical Center (JMMC) in Walnut Creek has developed incrementally over the past three decades to become a 342-bed, 365,000-square-foot health care complex. The John Muir Medical Center is now requesting city approval of a new Master Plan that would allow up to 833,000 square feet of additional medical and ancillary uses to be constructed over the next approximately 20 years. This expansion would be permitted on three separate properties owned by JMMC, and would include:

- (1) A maximum of 535,000 square feet of additional floor area at the 18-acre Main Campus Site (1601 Ygnacio Valley Road), which currently contains the existing 365,000 square foot medical center facility;
- (2) A maximum of 148,000 square feet of new floor area at the 7.17-acre La Casa Court Site (185 La Casa Via and the adjacent vacant property), which currently contains a 2,000-square-foot medical office building; and
- (3) A maximum of 150,000 square feet of new floor area at the 6.26-acre 230 La Casa Via Site, which is currently vacant.

The applicant also proposes to establish a system of building volume "envelope" restrictions, with a transition in building envelope size and building intensity from "lowest intensity" for the La Casa Court and 230 La Casa Via sites up to "highest intensity" for the Main Campus Site; and to implement various specific common amenity and infrastructure improvements within these sites over the 20-year life of the proposed Master Plan buildout.

In addition, at the 2.66-acre Schulze Property, located behind the La Casa Court Site and not owned by John Muir Medical Center, the applicant, at the request of this landowner, proposes to change the general plan designation from *Single Family Low* to *Hospital*. This property, however, will remain as a single family home and will be designated as such in the proposed Planned Development Ordinance.

Project access characteristics would vary with the level of Master Plan buildout. Under the full buildout scenario, referred to in this EIR as the "acquisition option" because it would require JMMC to purchase property it does not currently own, the primary access to the Main Campus Site would be via a new roadway connection at Ygnacio Valley Road ("Medical Center Way") which would replace the existing La Casa Via/Ygnacio Valley Road intersection. Partial buildout, referred to as the "nonacquisition option," would retain the existing La Casa Via/Ygnacio Valley Road intersection, but would move the JMMC driveway connection to La Casa Via closer to Ygnacio. Under either alternative, no significant modifications are proposed for the existing signalized JMMC driveway on Ygnacio Valley Road.

The applicant is requesting (1) Design Review Commission approval of the proposed Master Plan and related design and development guidelines; (2) a General Plan Amendment to the City of Walnut Creek General Plan to redesignate a portion of the La Casa Court Site from *Single-Family Low* to *Hospital*, increase the maximum "floor-to-area ratio" (FAR)<sup>1</sup> allowed for the Main Campus Site from 0.60 to 1.15, and pre-designate the 230 La Casa Via Site (located in unincorporated Contra Costa County) to *Hospital*; (3) an amendment to the city-adopted Specific Plan Six to allow low-intensity medical uses on the La Casa Court Site; (4) a city rezoning of the Main Campus and La Casa Court Sites, and prezoning of the unincorporated 230 La Casa Via Site, with a new Planned-Development zone and associated specific (Master Plan) standards; (5) a Development Agreement between JMMC and the city which would limit the P-D standards to a 20-year term; and (6) approval by the East Bay Regional Park District of a Master Plan proposed trail realignment. Upon Master Plan approval, the applicant also intends to file an application to the city and LAFCO to annex the 230 La Casa Via Site into the city of Walnut Creek. In addition, future Master Plan-related development will require review and approval by state agencies, including the State of California's Office of Statewide Health Planning and Development.

## B. ENVIRONMENTAL ISSUES

As provided for in the CEQA statutes and guidelines, the environmental focus of this EIR is limited to those areas of controversy or issues known to the city (the Lead Agency), including those concerns identified as possibly significant by the City of Walnut Creek Community

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<sup>1</sup>The amount or intensity of building construction is typically regulated in terms of the amount of building floor area (in square feet) allowed per square foot of net site area--i.e., in terms of the "floor-to-area ratio" or FAR.

Development Department in its preliminary review (Initial Study) of the proposed project, and by other interested agencies and individuals in response to the city's Notice of Preparation (NOP).<sup>1</sup> As described in the Introduction to this EIR, these areas of environmental concern include:

1. Land use,
2. Visual and urban design factors,
3. Transportation and parking,
4. Employment and housing,
5. Public services,
6. Noise and vibration,
7. Health and safety,
8. Soils, geology and seismicity,
9. Drainage and water quality,
10. Air quality,
11. Vegetation and wildlife, and
12. Cultural resources.

### **C. SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Each significant project impact and associated mitigation measure identified in this EIR is summarized in the SUMMARY OF IMPACTS AND MITIGATIONS chart that follows. The summary chart has been organized to correspond with the more detailed impact and mitigation discussions in Chapter IV of this EIR. The chart is arranged in five columns: (1) significant adverse environmental impacts, (2) level of impact significance prior to implementation of recommended mitigation measures, (3) recommended impact mitigation measures, (4) entity responsible for implementing each mitigation measure, and (5) level of impact significance after implementation of the mitigation measure(s).

In those instances where more than one measure may be required to mitigate an impact to a less-than-significant level, a series of mitigation measures is listed. For a complete description of the environmental setting, impacts, and mitigation measures associated with each particular topic of concern, please refer to Chapter IV of this EIR.

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<sup>1</sup>See Appendix A for the NOP.



## SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<i>LAND USE COMPATIBILITY</i>				
<u>Above-Grade Parking. (LU Impact 1)</u> The project would allow substantial expansion of the existing medical uses on the Main Campus Site. To minimize related land use impacts on the adjacent San Miguel neighborhood, the Master Plan includes a buffer at the north side of the Main Campus Site which would incorporate landscaping, a 50-foot building setback, and a stepped-down building envelope to the setback. These land use buffer provisions would be sufficient for most of the medical and ancillary uses permitted by the Master Plan. However, possible construction of an above-grade parking garage at the northeastern or northwestern edge of the Main Campus Site, immediately adjacent to the San Miguel neighborhood, could result in a combination of noise, odor, and visual impacts which, when considered cumulatively, would represent a <i>potentially significant adverse land use impact</i> of the project.	S	<p>Implementation of the following mitigation measure will reduce identified project land use impacts on the San Miguel neighborhood to a less than significant level:</p> <ul style="list-style-type: none"> <li>Any above-grade parking structures on the Main Campus site shall be set back a minimum of 200 feet from the northwestern/northeastern property line.</li> </ul>	Applicant	LS

S = Significant  
 LS = Less than significant  
 SU = Significant unavoidable impact  
 NA = Not applicable



Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p><u>Service Road Impacts on Walnut Creek Hospital. (LU Impact 2)</u> Walnut Creek Hospital is a separate, non-JMMC facility located between the JMMC Main Campus and La Casa Court sites. Walnut Creek Hospital is a general-plan-identified <i>Community Facility</i>, providing mental health care services for adults, adolescents and children.</p> <p>Under the JMMC Master Plan "Nonacquisition Option" (i.e., without full extension of Medical Center Way), JMMC would be required to provide a service road between the Main Campus Site (i.e., eastern terminus of Medical Center Way) and the La Casa Court Site through the existing parking area at the rear of Walnut Creek Hospital when the La Casa Court and/or 230 La Casa Via Site is developed (see Figures 5, 6 and 7).</p> <p>The service road would require, at a minimum, an easement agreement with Walnut Creek Hospital. No development standards or design guidelines are proposed in the Master Plan for this new service road. The affected area at the rear of Walnut Creek Hospital is relatively narrow and, if developed as a service road for the La Casa Court and 230 La Casa Via sites,</p>	S	If the La Casa Court Site is developed <i>without</i> the full extension of Medical Center Way, construct the required service road at the rear of Walnut Creek Hospital only after detailed design and development guidelines for this access way have been prepared by the applicant and have been reviewed and approved by the city. These design guidelines shall include measures to adequately buffer the service road from the existing hospital and to ensure that an acceptable operational environment is maintained.	Applicant	LS

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LS = Less than significant  
SU = Significant unavoidable impact  
NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
would carry a significant amount of traffic (i.e., all of the service vehicle traffic for up to 300,000 square feet of medical center floor area) in close proximity to the existing psychiatric hospital use, with almost no setback between the hospital and the service road right-of-way. This combination of factors constitutes a <i>potentially significant adverse land use compatibility impact</i> on Walnut Creek Hospital.				
<u>Medical Center Way Impacts on Walnut Creek Hospital. (LU Impact 3)</u> Under the Master Plan "Acquisition Option," Medical Center Way would eventually extend through the Walnut Creek Hospital property to the La Casa Court Site. As illustrated by Figure 4, such an extension would require at least a partial demolition of Walnut Creek Hospital, with possible reconstruction of the demolished portion on the La Casa Court Site. It appears that the modified rear portion of Walnut Creek Hospital would abut the new Medical Center Way with minimal setback. The Master Plan contains no development standards or design guidelines for this scenario. Any building demolition would presumably require at least temporary relocation of hospital operations. The new roadway could also significantly reduce	S	As long as Walnut Creek Hospital continues to operate on its current site as an in-patient facility, the following mitigation requirements shall apply:  Prior to demolition of any portions of Walnut Creek Hospital, the applicant shall prepare a plan which adequately provides patient protection during the roadway construction period. A letter from Walnut Creek Hospital, stating that the protection plan is adequate, shall be required as a condition of Use Permit approval. In addition, the applicant shall prepare detailed design guidelines for the portion of Medical Center Way at Walnut Creek Hospital which include measures to ensure that an acceptable long-term operational	Applicant	LS

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NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
privacy and increase noise levels at Walnut Creek Hospital. These possible effects constitute a <i>potentially significant adverse impact</i> of the project on Walnut Creek Hospital.		environment for Walnut Creek Hospital is maintained.		
<u>Project Demolition and Construction Period Land Use Compatibility Impacts. (LU Impact 4)</u> The Master Plan proposes expansion of the existing medical center on the Main Campus Site without demolition of the existing facilities. However, under the Master Plan "Acquisition Option," the 1515 Ygnacio Valley Road property and all or a portion of the Walnut Creek Hospital property would be purchased by JMMC and the existing medical office and at least a portion of the existing Walnut Creek Hospital structure would be demolished for the purpose of extending the proposed Medical Center Way. The JMMC-owned 2,000 square-foot residential structure converted to medical office use on the La Casa Court Site (185 La Casa Via) is also likely to be eventually demolished to accommodate Master Plan buildout. If unmitigated, associated demolition/construction noise and dust impacts from these actions would be temporary, but <i>significant</i> , for both onsite and surrounding land uses (Walnut Creek Hospital, the Corvey Court neighborhood, and homes abutting these project	S	To reduce project demolition/construction-period impacts on adjacent residential and medical uses to a less-than-significant level, incorporate in the Master Plan conditions of approval construction contract requirements calling for implementation of conventional construction/demolition noise and dust abatement measures. Sections IV.F.3 and IV.J.3 of this EIR (Noise and Air Quality impact mitigation sections) include specific lists of such measures.	Applicant	LS

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NA = Not applicable



Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
subareas in the San Miguel and La Casa Via neighborhoods).				
<u>Onsite Construction/Demolition Impacts.</u> <b>(LU Impact 5)</b> The demolition/construction period impacts noted above for surrounding land uses could also affect the existing JMMC uses on the Main Campus Site, representing a temporary, but <i>significant</i> , adverse land use compatibility impact (especially on the inpatient functions of the existing medical center).	S	Implement the same demolition/construction mitigations recommended above for surrounding land uses, including the specific measures listed in section IV.F.3 of this EIR (Noise mitigation section) to protect existing hospital operations.	Applicant	LS

#### VISUAL AND URBAN DESIGN FACTORS

##### *Building Intensity*

<u>Main Campus Site Impacts on Vicinity Character.</u> <b>(V Impact 1)</b> The proposed Master Plan would allow an "urban" scale of development by increasing the maximum allowable FAR on the Main Campus Site from 0.60 to 1.15, and by allowing new structures up to six stories/89 feet in height. The building sizes permitted by these development standards could be highly visible from various surrounding vantage points. Relative to the surrounding suburban-scaled development (one- and two-	S	No feasible mitigations have been identified to reduce the impact of proposed Main Campus Site development on the visual character of the vicinity to a less than significant level; the change here would represent a <i>significant unavoidable adverse visual and urban design impact</i> of the Master Plan.	Applicant	SU
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NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>story homes and commercial structures of no more than four stories), the development intensity proposed for the Main Campus site represents a <i>potentially significant adverse visual and urban design impact</i>.</p>				
<p><u>Impacts on "Gateway" Routes Under the Nonacquisition Option. (V Impact 2)</u> Under the Master Plan "Nonacquisition Option," the existing La Casa Via intersection configurations at Ygnacio Valley Road and Montego Road would be retained (see Figure 5). To reach the proposed "medical center entrance court" at the main lobby entrance of the Main Campus Site, motorists would need to (a) turn east on La Casa Via, (b) turn north onto the proposed "North-South Road" at the southwestern corner of the Main Campus Site, and (c) turn east onto Medical Center Way. In terms of readability and wayfinding, this approach to the medical center main entrance would lack a coherent, logical progression and, if development occurs in the southwest corner of the Main Campus site, the main entrance will not be visible until the final turning movement onto Medical Center Way. These Master Plan "Nonacquisition Option" La Casa Via access deficiencies would represent a</p>	S	<p>The following measure would reduce the identified adverse urban design impact to a less than significant level:</p> <ul style="list-style-type: none"> <li>Defer development of the southwestern corner of the Main Campus Site (bounded by the "north-south road," Medical Center Way, the "pedestrian link," and La Casa Via in Figure 5) until the adjacent 1515 Ygnacio Valley Road property is purchased and developed with the extension of Medical Center Way. Keeping this southwestern corner free of building mass until Medical Center Way is extended to Ygnacio Valley Road will allow driver wayfinding from La Casa Via without being totally dependent on signage. This measure would also preserve views of Mount Diablo from La Casa Via until Medical Center Way is extended to Ygnacio Valley Road.</li> </ul>	Applicant	LS

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NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<i>significant adverse urban design impact of the Master Plan.</i>				
<u>San Miguel Neighborhood Transition.</u> <b>(V Impact 3)</b> The Master Plan would allow construction of up to a three-story/49-foot structure to the north of the existing service road, adjacent to the Ygnacio Canal. This permitted building envelope, which the applicant has indicated could be a parking structure, would replace an existing undeveloped 213-foot-high knoll. The existing knoll, which contains seven native oaks serves as an important visual feature and buffer between the JMMC buildings on the Main Campus Site and the San Miguel neighborhood. The importance of the knoll as a visual buffer would increase as the Master Plan approaches buildout. Building construction on this knoll, or within any of the onsite open space area located north of the existing service road, would represent a <i>significant adverse visual impact</i> .	S	<p>The following measure would reduce the identified land use impact of the project on the San Miguel neighborhood to a less than significant level:</p> <ul style="list-style-type: none"> <li>On the Main Campus Site, development shall not be permitted north of the existing service road (north of the feature marked "I-2" on Figure 6 in section III of this EIR). The existing topographic contours of the knoll at this location shall be retained.</li> <li>Also, implement the mitigation measure identified herein for <i>LU Impact 1</i>.</li> </ul>	Applicant	LS
<u>Parking Structures Excluded from FAR Limits.</u> <b>(V Impact 4)</b> Because above-ground parking is not included in city (and the proposed Master Plan) FAR calculations, the maximum FARs proposed by the Master Plan do not reflect the	S	The following measures would reduce identified adverse building intensity impacts associated with potential parking structure needs to a less than significant level:	Applicant	LS

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NA = Not applicable



Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p><u>total potential building mass</u> if above-ground parking structures are constructed. Most of the existing JMMC surface parking will be displaced with internal site improvements and new structures, meaning that a high proportion of future parking spaces will be in either above-ground or subsurface parking garages. Based on existing city code requirements, it can be anticipated that the three project subareas, at buildout, may include a total of approximately 2,932 parking spaces.</p> <p>Assuming that parking would be distributed roughly proportionately among the three project subareas, and approximately ten percent of the Main Campus Site parking spaces would be provided in surface lots, the remaining total of approximately 1,985 Main Campus parking spaces would be provided within parking structures at Master Plan buildout.</p> <p>At a rate of 325 square feet per parking space, 1,985 parking spaces would result in approximately 645,125 square feet of parking garage floor area, equivalent to a 78 percent increase in the total actual FAR (building and parking structures) allowed by the project.</p>		<ul style="list-style-type: none"> <li>▪ All covered at- and above-grade parking shall be counted toward the overall permitted FAR at a rate of 50 percent (i.e., one square foot of covered above- or at-grade parking would contribute 0.5 square feet toward the overall permitted FAR).</li> <li>▪ Detailed design guidelines and development standards shall be developed to city satisfaction for above-ground parking structures prior to city adoption of the Master Plan.</li> </ul>		

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>The implications of this potential parking structure mass on the Main Campus Site raises important issues regarding the importance of effective parking structure design controls, which are not thoroughly addressed in the Master Plan. The parking structure components could become dominant visual elements, prominently visible from both the internal circulation system and surrounding local roadways. Without adequate guidelines for the location and design of these parking structures, it is possible that they could significantly detract from the overall urban and pedestrian character envisioned for the Main Campus Site. This would represent a <i>potentially significant adverse visual and urban design impact</i>.</p>				
<p><i>Impacts on Surrounding Vantage Points</i></p>				
<p><u>La Casa Via Looking East. (V Impact 5)</u> Master Plan-permitted construction could eventually totally obscure existing views of Mount Diablo and the surrounding foothills from La Casa Via. Although this effect would be partially mitigated under the "Acquisition Option" by the extension of Medical Center Way (which would open up views of Mount Diablo to</p>	S	<p>No feasible mitigation measures have been identified to reduce the identified visual impact on La Casa Via, looking east, to a less than significant level. Although implementation of the measure identified above for <i>V Impact 4</i> would improve the project appearance from this vantage point, the project-related loss of Mount Diablo views from La Casa Via would represent</p>	Applicant	SU

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
Ygnacio Valley Road), the complete loss of Mount Diablo views from this segment of La Casa Via would represent a <i>significant adverse visual impact</i> of the Master Plan.		a <i>significant unavoidable adverse impact</i> of the Master Plan.		
<i>Project Subarea Interrelationships</i>				
<u>Nonacquisition Option Service Road</u> ( <i>V Impact 6</i> ) Under the "Nonacquisition Option," the Master Plan would require a service road connection between the Main Campus and La Casa Court Sites which would go around the back of the existing Walnut Creek Hospital. A specific alignment and associated design guidelines have not been established for this connection, which would be prominently located at the terminus of Medical Center Way. Without design guidelines for this connection, its visual relationships, function and feasibility cannot be evaluated. It does appear that without the Medical Center Way link between the Main Campus and La Casa Via sites, the Master Plan objective of a strong visual relationship between these two subareas would be deferred or eliminated. This deficiency represents a <i>potentially significant adverse urban design impact</i> of the Master Plan.	S	Under the "Nonacquisition Option," the Master Plan objective of a strong visual relationship between the Main Campus and La Casa Court sites could not be achieved, representing a significant temporary or permanent unavoidable impact (permanent if the necessary acquisitions are not made).	NA	SU

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<b>TRANSPORTATION AND PARKING</b>				
<i>Project Intersection Impacts</i>				
Expansion Increment 1, Base 1997. <b>(T Impact 1)</b> With construction of Expansion Increment 1 (100,000 square feet of new development) the level of service (LOS) rating at two intersections along Ygnacio Valley Road is anticipated to worsen significantly as opposed to future conditions without the project: (a) the <i>Ygnacio Valley/Marchbanks-Tampico</i> intersection would change from LOS C (0.80) to D (0.81) during the AM peak hour; and (b) the <i>Ygnacio Valley/Walnut-Bancroft</i> intersection would change from LOS D (0.90) to E (0.91) during the AM peak hour. Based on TRANSPAC criteria, this level of LOS degradation would represent a <i>significant adverse impact</i> .	S	<p>The following mitigation measures would reduce the impacts of <i>Expansion Increment 1</i> on these Ygnacio Valley Road intersections, but not to less than significant levels:</p> <ul style="list-style-type: none"> <li>At the <i>Ygnacio Valley/Marchbanks-Tampico</i> intersection, add a second northbound left-turn lane and striping to create the following northbound approach lane geometrics: two left-turn lanes and one shared through-right lane. This would result in a buildout intersection LOS of D (0.81) during the AM peak hour (slight improvement) and D (0.89) during the PM peak hour (significant improvement).</li> <li>At the <i>Ygnacio Valley/JMMC north driveway</i> intersection, add a second left-turn lane, a second right-turn lane, and striping to create the following northbound approach lane intersection geometrics: two left-turn lanes and two right-turn lanes. In addition, add a second westbound left-turn lane on Ygnacio Valley Road. This would result in a buildout intersection LOS of B (0.68) during the AM</li> </ul>	Applicant	SU

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<p>peak hour and D (0.88) during the PM peak hour (significant improvement).</p> <ul style="list-style-type: none"> <li>At the <i>Ygnacio Valley/San Carlos</i> intersection, add a through lane, a separate right-turn lane, and striping to create the following southbound-approach lane intersection geometrics: one left-turn lane, one through lane, and one right-turn lane. In addition, add a second northbound left-turn lane on San Carlos Drive, and change the signal phasing to eight-phase operation. This would result in a buildout intersection LOS of D (0.83) during the AM peak hour and E (0.98) during the PM peak hour (significant improvement).</li> <li>At the <i>Ygnacio Valley/Bancroft</i> intersection, add a separate right-turn lane and striping to create the following eastbound approach lane intersection geometrics: two left-turn lanes, three through lanes, and one right-turn lane. This would result in a buildout intersection LOS of E (0.94) during the AM peak hour and E (0.93) during the PM peak hour (slight improvement).</li> </ul> <p>No further feasible intersection mitigation measures have been identified. Even after</p>		

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		implementation of the above measures, the project impact on intersection operation would remain an <i>unavoidable significant adverse impact</i> .		
Expansion Increment 2, Base Year 1999. ( <b><i>T Impact 2</i></b> ) With construction of Expansion Increment 2 (233,000 square feet of total new development), the LOS rating at three of the study intersections along Ygnacio Valley Road is expected to worsen significantly as opposed to future conditions without the project: (a) the <i>Ygnacio Valley/Marchbanks-Tampico</i> intersection would change from LOS C (0.80) to D (0.81) during the AM peak hour; (b) the <i>Ygnacio Valley/Walnut-Bancroft</i> intersection would change from LOS D (0.90) to E (0.92) during the AM peak hour; and (c) the <i>Ygnacio Valley/JMMC north driveway</i> intersection would change from LOS C (0.80) to D (0.81) during the PM peak hour. Based on TRANSPAC criteria, this level of LOS degradation would represent a <i>significant adverse impact</i> .	S	Same as for <i>T Impact 1</i> above. No further feasible intersection mitigation measures have been identified. Even after implementation of the above measures, the project effects on intersection operation, although substantially reduced, would remain an <i>unavoidable significant adverse impact</i> .	Applicant	SU
Expansion Increment 3, Base Year 2001. ( <b><i>T Impact 3</i></b> ) With construction of Expansion Increment 3 (333,000 square feet of total new development), the LOS rating at three of the	S	Same as for <i>T Impact 1</i> above. No further feasible intersection mitigation measures have been identified. Even after implementation of the above measures, the project effects on	Applicant	SU

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NA = Not applicable



Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
study intersections along Ygnacio Valley Road is expected to worsen significantly as compared to future conditions without the project: (a) the <i>Ygnacio Valley/Marchbanks-Tampico</i> intersection would change from LOS C (0.80) to D (0.83) during the AM peak hour and LOS D (0.89) to E (0.94) during the PM peak hour; (b) the <i>Ygnacio Valley/Walnut-Bancroft</i> intersection would change from LOS D (0.90) to E (0.93) during the AM peak hour; and (c) the <i>Ygnacio Valley/JMMC north driveway</i> intersection would change from LOS C (0.80) to D (0.83) during the PM peak hour. Based on TRANSPAC criteria, this level of LOS degradation would represent a <i>significant adverse impact</i> .		intersection operation, although substantially reduced, would remain an <i>unavoidable significant adverse impact</i>		
<u>Expansion Increment 4, Base Year 2004. (T Impact 4)</u> With construction of Expansion Increment 4 (483,000 square feet of total new development), the LOS rating at three of the study intersections along Ygnacio Valley Road is expected to worsen significantly as compared to future conditions without the project: (a) the <i>Ygnacio Valley/Marchbanks-Tampico</i> intersection would change from LOS C (0.80) to D (0.85) during the AM peak hour and LOS D (0.89) to E (0.96) during the PM peak hour;	S	Same as for <i>T Impact 1</i> above. No further feasible intersection mitigation measures have been identified. Even after implementation of the above measures, the project effects on intersection operation, although substantially reduced, would remain an <i>unavoidable significant adverse impact</i> .	Applicant	SU

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
(b) the <i>Ygnacio Valley/Walnut-Bancroft</i> intersection would change from LOS D (0.90) to E (0.94) during the AM peak hour; and (c) the <i>Ygnacio Valley/JMMC north driveway</i> intersection would change from LOS C (0.80) to D (0.86) during the PM peak hour. Based on TRANSPAC criteria, this level of LOS degradation would represent a <i>significant adverse impact</i>				
Expansion Increment 5 (Buildout), Base Year 2010. ( <i>T Impact 5</i> ) With construction of Expansion Increment 5 (833,000 square feet of total new development), the LOS rating at five of the study intersections along Ygnacio Valley Road is expected to worsen significantly as compared to future conditions without the project: (a) the <i>Ygnacio Valley/Marchbanks-Tampico</i> intersection would change from LOS C (0.80) to D (0.86) during the AM peak hour and LOS D (0.89) to F (1.00) during the PM peak hour; (b) the <i>Ygnacio Valley/Walnut-Bancroft</i> intersection would change from LOS D (0.90) to E (0.97) during the AM peak hour; (c) the <i>Ygnacio Valley/JMMC north driveway</i> intersection would change from LOS C (0.80) to E (0.94) during the PM peak hour; (d) the <i>Ygnacio Valley/La Casa Via</i> intersection would	S	In addition to the mitigation measures identified for <i>T Impact 1</i> above, implement the following: <ul style="list-style-type: none"> <li>At the reconstructed <i>Ygnacio Valley/Medical Center Way</i> intersection (currently La Casa Via), add a third northbound left-turn lane and striping to create the following northbound approach lane geometrics: two left-turn lanes, one shared left-through lane, and a separate right-turn lane. Add a separate eastbound right-turn lane and a second westbound left-turn lane on Ygnacio Valley Road. Change the signal phasing to a split phase for Medical Center Way-Kinross Drive. These measures would improve intersection LOS to B (0.70) during the AM peak hour and D (0.87) during the PM peak hour (slight improvement).</li> </ul>	Applicant	SU

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
change from LOS B (0.69) to C (0.72) during the AM peak hour; and (e) the <i>Ygnacio/San Carlos</i> intersection would change from LOS D (0.86) to LOS E (0.92) during the AM peak hour and from LOS E (0.99) to F (1.03) during the PM peak hour. Based on TRANSPAC criteria, this level of LOS degradation would represent a <i>significant adverse impact</i> .		No further feasible physical mitigation measures have been identified. Even after implementation of the above measures, the project effect on intersection operation would remain an <i>unavoidable significant adverse impact</i> .  JMMC should also voluntarily continue its TDM efforts to reduce the existing vehicle per employee ratio (VER) of 0.85, as described below under <i>T Impact 6</i> .		
<i>Project Arterial Roadway Impacts</i>				
<u>Future Base Case Conditions Plus Project Expansion Increment 5. (<i>T Impact 6</i>)</u> With completion and occupancy of JMMC <i>Expansion Increment 5</i> , the average travel speed along Ygnacio Valley Road would be reduced by one mile per hour during both the AM westbound commute direction and PM eastbound commute direction, and the overall arterial roadway LOS along the route would remain at F during both time periods. This effect would represent a <i>significant adverse impact</i> .	S	Through a voluntary cooperative Development Agreement with the city of Walnut Creek, JMMC shall continue existing TDM efforts to lower the current vehicle per employee ratio (VER) of 0.85. Continue to implement existing and additional JMMC TDM efforts, including the Master Plan requirement for convenient bus turnouts and bicycle and pedestrian circulation with safe bicycle storage facilities. Continue the guaranteed ride home program, subsidized transit tickets, subsidized vanpools, and cash prize incentives for those employees using a commute alternative or parking off-site. Together with the intersection mitigation measures described above for <i>T Impact 1</i> and	Applicant	SU

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		5, future compliance with such TDM provisions would lessen project impacts on Ygnacio Valley Road. However, even after effective implementation of this measure and the above intersection improvement measures, the project contribution to cumulative arterial roadway operational impacts would remain an <i>unavoidable significant adverse impact</i> .		
<i>Project Internal Circulation/Access Impacts</i>				
<u>Ygnacio Crosswalk.</u> ( <i>T Impact 7</i> ) Under the "Acquisition Option," the proposed new central JMMC access route, Medical Center Way, would be aligned on an east-west access in-line with the existing Main Campus buildings (see Figure 4). The resulting skewed nature of the new Ygnacio Valley/Medical Center Way intersection would result in a much longer pedestrian crosswalk across Ygnacio Valley Road (as compared to the existing crosswalk). This new crosswalk configuration would require much longer pedestrian crossing times for the secondary signal phase, resulting in less frequent or shorter green light periods at the Ygnacio/Medical Center Way intersection for vehicles traveling on Ygnacio Valley Road. The reduced "green time" would worsen existing and	S	The future design of the Ygnacio Valley Road/Medical Center Way intersection shall be refined to align the associated Ygnacio Valley Road crosswalk at a 90 degree angle with Ygnacio Valley Road.	Applicant	LS

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NA = Not applicable



Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
projected traffic congestion on Ygnacio Valley Road this roadway, representing a <i>potentially significant adverse impact</i> .				
<p><u>Shell Ridge Medical Office Access. (T Impact 8)</u> Under the "Acquisition Option," direct access to La Casa Via from Ygnacio Valley Road would be eliminated, and a new through route in and out of the La Casa Via neighborhood would be created by realigning (curving) La Casa Via into Montego. The existing segment of La Casa Via in front of the Main Campus Site would be converted into a through driveway curving on the west end to connect with Medical Center Way at a four-way intersection with the new north-south access drive, and connecting at the east end to a T-intersection where La Casa Via curves into Montego.</p> <p>With these changes, the primary access route to the La Casa Via residential neighborhood would become Montego Road, as intended, with beneficial local traffic impacts. However, the modified section of La Casa Via between Montego and Ygnacio Valley Road would become a more constrained, less direct access to the existing Shell Ridge medical office complex, with an awkward connection at the</p>	S	To clearly delineate access to and from the Shell Ridge medical office properties southwest of La Casa Via, incorporate a signing and striping plan in the Master Plan "development units" improvement plan which, to the city's satisfaction, improves roadway service to affected properties.	Applicant	LS

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NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
new La Casa Via-Montego curve. Also, the existing main access driveway to the Shell Ridge medical office complex on La Casa Via would be realigned to connect with a curved extension of the new north-south access road, creating an undesirable configuration from an operational and safety standpoint. These internal circulation deficiencies would represent a <i>significant adverse impact</i>				
<p><u>Medical Office Driveway Access from La Casa Via. (T Impact 9)</u> Under the "Nonacquisition Option," La Casa Via would continue to connect with Ygnacio Valley Road. Between Ygnacio Valley Road and the La Casa Via driveway to the Main Campus Site, existing medical office buildings with driveway access from La Casa Via (particularly 1515 Ygnacio Valley Road) would continue to experience constrained access to and from La Casa Via during the PM peak hour due to long vehicle queues along the roadway.</p> <p>The closure of the existing JMMC driveway off of La Casa Via and the construction of a new La Casa Via access (the north-south road) closer to Ygnacio Valley Road would result in a shorter approach on La Casa Via between Ygnacio</p>	S	With additional traffic generated by Master Plan development and the relocation of the Main Campus La Casa Via driveway in Expansion Increment 2, vehicle queues along La Casa Via would lengthen, causing driveway access to worsen. Under the proposed basic Master Plan circulation scheme, no feasible mitigation measures have been identified to correct this problem and the operational impacts to these medical office driveways would remain an <i>unavoidable significant adverse impact</i> .	Applicant	SU

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NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
Valley Road and the entrance to the Main Campus Site. Together with the additional traffic generated from Master Plan development, this change would increase vehicle queuing on this segment of La Casa Via, worsening existing medical office building driveway access constraints at this location. This would represent a <i>potentially significant adverse impact</i> .				
<u>Emergency Vehicle Access. (T Impact 10)</u> The design of the three Master Plan-proposed traffic circles ("roundabouts")--one at the neighborhood entrance on La Casa Via, one at the lobby entrance of the Main Campus Site, and one at the rear of the La Casa Court Site--do not meet minimum emergency access requirements. Currently, emergency fire vehicles require a minimum outside turning radius of 42 feet. The JMMC Master Plan design guidelines indicate a proposed "roundabout" radius of 34 feet. This deficiency would represent a <i>significant adverse impact</i> .	S	Specify in the Master Plan that the proposed "neighborhood entrance cul-de-sac" (traffic circle) on La Casa Via, as well as the roundabouts at the Medical Center Entrance Court and the La Casa Court Site, will have a minimum outside turning radius of 42 feet to accommodate emergency vehicles.	Applicant	LS

S = Significant  
LS = Less than significant  
SU = Significant unavoidable impact  
NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<i>Project Parking Impacts</i>				
<u>Parking Rate Cap.</u> <b>(T Impact 11)</b> To address future parking needs, the Master Plan calls for preparation of a parking study for each individual future development application under the plan, with the stipulation that in no case shall the identified parking demand rate exceed 2.9 spaces per 1,000 feet of floor area. Because the exact types of future uses are not known at this time, it cannot be determined with certainty that some future development component will not have a parking demand rate in excess of the 2.9 spaces per 1,000 square feet maximum proposed by the applicant. Because this EIR analysis indicates that actual parking demand may exceed 2.9 spaces per 1,000 square feet for some particular phase of development, the proposed cap on maximum parking requirements may result in a <i>significant adverse parking impact</i> .	S	To ensure that adequate parking is available for all phases and components of Master Plan development, require that each development application under the Master Plan provide parking commensurate with the findings of a specific <i>parking demand study</i> for the proposed development (for city review and approval), and stipulate that the Master Plan shall not impose a maximum parking ratio on the results of the specific parking demand studies.	Applicant	LS
<u>Main Campus Site.</u> <b>(T Impact 12)</b> The Master Plan indicates that staff and physician parking would be located with access points on the proposed service road, and patient and visitor parking would be located in parking structures with access to/from the proposed Medical	S	Within the Main Campus Site, stipulate in the Master Plan that parking lot/structure access points shall be located at a minimum of 100 feet from the Medical Center Way intersections with the new north-south road, the medical center entrance court, and the new service road.	Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
Center Way. There would be no parking access to/from La Casa Via.		Similarly, stipulate that parking access points on the service road shall be a minimum of 100 feet from that road's intersections with the new north-south road west of the campus, and with Medical Center Way.		
The Master Plan also establishes that Medical Center Way would have intersections at the various new connecting streets along the west side of the campus, at the Medical Center Entrance Court and at the peripheral service road. The addition of full access parking driveways along Medical Center Way and the service road could conflict with the vehicle and pedestrian movements at these intersections, a <i>potentially significant adverse impact</i> .				
La Casa Court and 230 La Casa Via Sites. <b>(T Impact 13)</b> Access to and from both the La Casa Court and 230 La Casa Via site parking areas would be at the proposed La Casa Via neighborhood entrance roundabout. The roundabout design could be somewhat confusing for motorists, particularly for patients and visitors, resulting in vehicle conflicts at this access point.	S	Revise the Master Plan to: (a) direct parking access for the La Casa Court Site toward the Medical Center Way terminus, with secondary access to and from La Casa Via; and (b) direct parking access for the 230 La Casa Via Site into the "roundabout" formed at the neighborhood entrance cul-de-sac. Because the roundabout would be a unique roadway feature, stipulate that signing shall be carefully designed to direct outbound motorists around the cul-de-sac and out via La Casa Via.	Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<i>Local Transit Impacts</i>				
Expansion Increment 5. ( <i>T Impact 14</i> ) With Expansion Increment 5, County Connection buses would no longer be able to access La Casa Via directly from Ygnacio Valley Road; they would need to change their routes in order to accommodate patrons living and working off of La Casa Via. In addition, development of the La Casa Court and 230 La Casa Via sites would necessitate new bus stops in front of these sites, on a portion of La Casa Via which is not currently served by bus transit.	S	<p>Include the following mitigation measures in the Master Plan to reduce project impacts on local transit service to below the level of significance:</p> <ul style="list-style-type: none"> <li>Require provision of bus turnouts for County Connection lines on La Casa Via east of Montego to serve adjacent JMMC development on the La Casa Court and 230 La Casa Via sites. These turnouts may be incorporated into the planned neighborhood entrance cul-de-sac on La Casa Via adjacent to the La Casa Court and 230 La Casa Via Sites.</li> <li>If and when bus service is planned for the La Casa Court and 230 La Casa Via sites, provide the city with a noise study, conducted at the expense of the applicant, regarding the noise impacts of the introduced bus service on adjacent residential and medical uses, including feasible noise mitigation measures if necessary to conform with the <i>Community Noise Subelement</i> of the general plan.</li> <li>For bus patrons working in the Shell Ridge medical office buildings, provide signage</li> </ul>	Applicant	LS

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NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		that would indicate the nearest bus stop for specific bus routes in the vicinity. With the displacement of bus stops along La Casa Via, these stops would likely be located at the newly re-figured Montego/La Casa Via intersection or at the new main entrance court on the JMMC campus.		
<i>Bicycle/Pedestrian Impacts</i>				
<u>Expansion Increment 3. (T Impact 15)</u> With completion of <i>Expansion Increment 3</i> , the Montego/La Casa Via intersection would be reconfigured and a new mid-block crosswalk would be installed on La Casa Via between the new service road and Montego to provide access between the Main Campus Site and the Shell Ridge medical office area. The mid-block crosswalk could result in pedestrian-vehicle conflicts here, since it would be located near the apex of the new curve with no stop-sign controls.	S	To reduce the potential for pedestrian/vehicle conflicts, locate the proposed crosswalk on La Casa Via at the La Casa Via/Montego intersection.	Applicant	LS
<u>Ygnacio Canal Bike Trail Connection. (T Impact 16)</u> As part of project development, the city has also expressed interest in providing a bike path connection through a portion of the project site between the Ygnacio Canal Trail and	S	Incorporate the following stipulation in the Master Plan: <ul style="list-style-type: none"> <li>The proposed bike path connection from Montego to the Ygnacio Canal Trail shall be</li> </ul>	Applicant	LS

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NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
La Casa Via. This city-proposed bike path connection would allow bikers or pedestrians to avoid travel along Ygnacio Valley Road between Montego and San Carlos Drive. Although the Master Plan proposes to provide such a bike path connection along the proposed 45-foot-wide landscaped buffer east of the La Casa Court Site, the city prefers that such a bike path connection follow a more direct route to Montego.		aligned along the proposed staff service road dividing the main campus site and the existing Walnut Creek Hospital. Specifically, the bike path connection shall be placed in or adjacent to the landscaped buffer along the eastern edge of the Main Campus Site.		

## PUBLIC SERVICES AND UTILITIES

### Sewer Service

The project would increase demands on the CCCSD's sewage collection and treatment system. Based on the typical sewage generation rate for hospital uses, the additional approximately 833,000 square feet of medical floor area allowed by the Master Plan would generate a total of approximately 520,625 additional gallons per day of wastewater at buildout. Associated collection and treatment impacts are described below:

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<u>Treatment Needs.</u> <b>(PSU Impact 1)</b> The project may generate the need for additional <u>special source control measures</u> to prevent hazardous wastes or other materials from entering the sewage collection system. The current medical center complex already includes such measures and systems to meet CCCSD discharge requirements. Additional measures needed over the course of Master Plan buildout may include installation of additional grease removal devices and establishment of appropriate waste sampling procedures, appropriate rules for laboratory operations, and periodic operations inspection requirements.	S	Require the applicant for any hospital, clinical, congregate care, medical office or other future floor area expansions under the proposed Master Plan to comply with the CCCSD's Source Control Ordinance. Compliance would be expected to reduce project-related sewage treatment impacts to a less-than-significant level. (Mitigations for other hazardous materials impacts are identified herein under Health and Safety).	Applicant, City, CCCSD	LS
<u>Collection Needs.</u> <b>(PSU Impact 2)</b> The project may require extension of the existing sewage collection system in the project site vicinity.	S	As mitigation for any Master Plan related extension of the existing sewage collection system, require the applicant to comply with the following standards and policies:  (a) The CCCSD's "Standard Specifications" for design of the on-site sewage collection system;  (b) The CCCSD's Hillside and Creek Area Sewer Policy, which addresses design procedures for collection systems in hillsides or unstable areas; and	Applicant, City, CCCSD	LS

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NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		(c) All applicable CCCSD connection fees and charges.		
<i>Water Service</i>				
<u>Project CCWD Impacts.</u> <b>(PSU Impact 3)</b> Buildout of the 230 La Casa Via Site under the Master Plan has the potential to prevent the Contra Costa Water District from implementing a planned underground water reservoir construction alternative involving this property. CCWD inability to locate a reservoir on this site could affect future water service adequacy within the district's Walnut Creek service area.	S	Require the project applicant to work with CCWD and vice versa to resolve whether the 230 La Casa Via Site is to be the selected new reservoir site alternative. If the 230 La Casa Via Site is chosen, revise the proposed Master Plan to accommodate the reservoir and avoid associated land use and other incompatibilities.	City, Applicant, CCWD	LS
<i>Parks and Recreation</i>				
<u>Trail Network.</u> <b>(PSU Impact 4)</b> The project proposes to realign the Briones/Mt. Diablo Trail, which currently extends along the west side of the 230 La Casa Via Site and bisects the La Casa Court Site. As shown on Figure 36 in this EIR, the realigned trail would extend along the eastern sides of the 230 La Casa Via and La Casa Court sites and then west along the southern boundary of the Schulze property to join the Ygnacio Canal Trail. This proposed trail	S	Require the project applicant to: <ul style="list-style-type: none"> <li>Work with the city and EBRPD staff to establish a mutually acceptable trail realignment standard, and incorporate the accepted alignment standard in the Master Plan.</li> <li>Work with the EBRPD to establish an appropriate trail width. In order to accommodate equestrian use, the EBRPD</li> </ul>	City, Applicant, EBRPD	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>relocation is not consistent with city alignment policies for the trail.</p> <p>In its initial Master Plan design concept, the project applicant has also provided for an eight-foot-wide paved trail, with a landscape buffer and a four-foot-wide unpaved path. These width provisions and other trail design aspects do not meet current EBRPD standards.</p>		<p>would prefer a two-foot-wide unpaved shoulder on one side, with a ten-foot-wide paved section and a four- to six-foot-wide unpaved shoulder on the other side.</p> <ul style="list-style-type: none"> <li>▪ Coordinate trail entry structure and gate placement with EBRPD operations staff.</li> <li>▪ Design road and driveway crossings to provide maximum safety for trail users. Treatments may include signs, striping, or other safety features, and design of the trail as a separate facility, rather than as a driveway or access for vehicular traffic.</li> <li>▪ Avoid closure of the trail for any length of time, if possible.</li> </ul>		

## NOISE

### *Compatibility of Master Plan Proposed Land Uses with the Projected Noise Environment*

Ygnacio Valley Road Noise. ( <b>N Impact 1</b> ) The Master Plan would provide for expansion of the existing main medical center building and construction of additional hospital structures in the vicinity of Ygnacio Valley Road. Currently,	S	For hospital building sites that are adjacent to Ygnacio Valley Road, implement noise abatement measures and specifications in site planning and building construction in order to achieve an interior noise level of 45 dBA or less.	Applicant, City	LS
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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
these portions of the Main Campus Site are exposed to noise levels of 64 dBA $L_{dn}$ . These levels are expected to increase to 65 dBA $L_{dn}$ in the future due to projected cumulative traffic increases on Ygnacio Valley Road with or without the project. The city's exterior noise standard for hospital uses is an $L_{dn}$ of 60 dBA. An exterior noise level of 65 dBA $L_{dn}$ is "conditionally acceptable" to the city.		For example, fixed windows or casement windows in new building facades would typically provide about 25 to 30 dBA of traffic noise reduction, and would be adequate to reduce interior noise levels in this environment to less than significant levels.		
<i>Project-Related Increases in Onsite Traffic Noise</i>				
<u>Medical Center Way. (N Impact 2)</u> The proposed Medical Center Way would be a new noise source, producing a noise level of 60 dBA $L_{dn}$ within 60 feet of the roadway centerline. The Master Plan envisions future buildings located directly adjacent to the new Medical Center Way. Noise levels at the building sides facing the street could exceed 60 dBA $L_{dn}$ .	S	For hospital buildings that are adjacent to the new Medical Center Way, require noise abatement measures and specifications in site planning and building construction to achieve an interior noise level of 45 dBA or less.	Applicant	LS
<u>Service Road. (N Impact 3)</u> Without full extension of the proposed Medical Center Way to the La Casa Court Site, a service road located next to the Walnut Creek Hospital would be required to serve any development of the La Casa Court Site. The road would be a new noise source at Walnut Creek Hospital. Traffic	S	If a service road is needed adjacent to the Walnut Creek Hospital, require that the road edge be located at least 20 feet from the Walnut Creek Hospital building.	Applicant	LS

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NA = Not applicable



Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
using the road could create a noise level of 60 dBA at a distance of 20 feet from the edge of the travel way				
<i>Other Onsite Noise Sources</i>				
<u>Mechanical Equipment Noise.</u> <b>(N Impact 4)</b> The Master Plan would allow for expansion of existing buildings and addition of several new buildings on the Main Campus Site, as well as new buildings at the La Casa Court and 230 La Casa Via sites. Anticipated mechanical equipment required to air-condition these buildings could increase noise levels noticeably at adjacent land uses.	S	To mitigate (avoid) noise impacts from building air conditioning equipment, select and orient mechanical equipment so that noise levels would not exceed 45 dBA L <sub>eq</sub> at residences near the 230 La Casa Via Site and the La Casa Court Site, and would not exceed 50 dBA at the residence adjacent to the northern portion of the main medical center. These standards can be met by orienting the building exhaust away from nearby noise-sensitive areas and by providing adequate shrouding, shielding, and muffling around ventilation systems affecting nearby areas.	Applicant	LS
<u>Parking Facility Noise.</u> <b>(N Impact 5)</b> Cars circulating through surface parking lots and new parking structures, and engines starting, doors slamming, car alarms sounding, and people talking in parking lots produces noise. The Master Plan has not identified any specific design criteria for parking facilities. However, if large above-ground parking structures are	S	Require detailed, project-specific noise assessments for any future proposals to construct parking facilities adjacent to the northern, eastern, or southern edges of the medical center campus, prior to the granting of a Building Permit. The studies shall recommend measures to ensure that noise from future parking facilities would not exceed city exterior	Applicant, City	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
located adjacent to noise-sensitive land uses, they could increase noise levels noticeably at these adjacent land uses.		and interior noise standards at the nearest adjacent residences and other noise-sensitive uses. At applicant expense, also retain a qualified acoustical consultant to conduct an independent review of the detailed noise assessment(s) and abatement recommendations. Require that the design of future parking facilities comply with the approved noise abatement recommendations.		
<i>Project-Generated Helicopter Noise</i>				
<u>Expansion of Onsite Land Uses Requiring Helicopter Service.</u> <b>(N Impact 6)</b> Helicopter noise from John Muir Medical Center is considered a substantial source of noise to neighbors in the San Miguel neighborhood. The Master Plan would allow a variety of medical land uses, in addition to and including emergency services, that have the potential to involve increased helicopter operations. Given the flexible nature of the proposed Master Plan, it is possible that the medical center could, for example, offer or expand services that would require greater use of helicopters for non-trauma-related purposes (e.g., organ transplants). Any proposed expansion of the hospital's trauma operations could also lead to	S	At the time of or within six months of Master Plan approval, the applicant shall submit a noise study which identifies the optimum eventual location for the helipad, based on minimizing noise impacts on surrounding residential neighborhoods. (Surface helipads as well as rooftop locations shall be analyzed.)  In addition, any subsequent Use Permit application shall include a separate study indicating potential increased helicopter traffic to and from the current helipad and the associated subsequent increase in noise. If the proposal would increase noise in the adjoining neighborhoods by more than 1 dBA, the Planning Commission may require that the	Applicant, City	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
increased helicopter flights, although such an expansion is not currently anticipated. The potential for future increases in helicopter noise due to increased helicopter-related medical center activities allowed by the Master Plan is considered a <i>potentially significant impact</i> .		<p>helipad be moved to the identified optimum location based on the initial noise study submitted at the time of (or within six months of) Master Plan approval.</p> <p>Helicopter noise from John Muir Medical Center is considered a substantial source of noise to neighbors in the San Miguel Neighborhood. Any potential increase in noise of more than 1 dBA <math>L_{dn}</math> to the adjoining neighborhoods from project-related helicopter operations shall be considered significant and appropriate mitigation measures implemented.</p>		
<p><u>Helipad Relocation.</u> (<i>N Impact 7</i>) Relocation of the helipad is not indicated in the Master Plan application. However, since the existing helipad lies within the Main Campus Site building mass envelope identified in the Master Plan, it is conceivable that the pad at some future time could be relocated within this envelope, perhaps to the top of a future new building.</p> <p>Relocation of the helicopter pad to a rooftop location could slightly reduce noise levels at adjacent homes. This would be a beneficial impact. However, relocation of the helipad closer to adjacent residences and/or an</p>	S	Same as mitigation for <i>N Impact 6</i> above.	Applicant, City	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
alteration of the helicopter flight path could increase noise levels in adjacent neighborhoods.				
<p><u>Project Construction Noise. (N Impact 8)</u> Construction associated with the various phases of Master Plan buildout could involve combinations of building demolition, site grading, new building construction, and roadway construction. Significant short-term noise impacts on sensitive onsite hospital operations and on offsite noise-sensitive land uses would be expected during periods of such construction activity.</p> <p>The greatest potential for adverse noise impacts would be to sensitive existing and new hospital operations. Residences in the San Miguel neighborhood areas adjacent to the Main Campus Site, and in the La Casa Via neighborhood areas adjacent to the La Casa Court Site and 230 La Casa Via Court Site, could also occasionally be exposed to high noise levels during periods of heavy construction.</p>	S	<p>Incorporate provisions into the Master Plan that would require future project construction contractors to comply with the following measures, with verification of such contract stipulations submitted to the city:</p> <p><u>(1) Scheduling.</u> Schedule construction activities to have the least impact on existing medical center facilities. This measure could include restricting typical demolition and construction activities to the hours of 8 AM to 5 PM. Certain activities, such as the use of jackhammers on existing buildings, may need to be scheduled for special time periods.</p> <p><u>(2) Hospital Patient Relocations.</u> If necessary, temporarily relocate patients who currently occupy portions of the existing hospital to other locations on campus during the loudest periods of nearby construction, i.e., when average 24-hour interior noise levels are likely to exceed 60 dBA.</p> <p><u>(3) Other Relocations.</u> If necessary due to temporary disturbances during various phases of</p>	Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<p>construction, temporarily relocate other activities in the hospital. Such relocations could be minimized or avoided by strategic scheduling of construction activities as described above.</p> <p><u>(4) Noise Barriers for Hospital Patient Rooms.</u> Where relocation is not feasible, construct temporary noise barriers as necessary to shield patient rooms within the existing hospital from new hospital building construction activities. It is recommended that this mitigation measure not be instituted until construction has begun and has been found to cause a significant disturbance to certain rooms. A plywood noise barrier could be erected quickly outside those affected rooms which face the construction sites. The combination of the barrier and restriction of construction to daytime only should reduce noise impacts to less than significant levels. The degree of the disturbance and corresponding mitigation needs, however, cannot be fully quantified until the construction activities actually take place.</p> <p><u>(5) Construction Contract Stipulations.</u> Also include in construction contracts the following stipulations with regard to other noise impact</p>		

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<p>mitigation measures to be implemented by the construction general contractor(s):</p> <ul style="list-style-type: none"> <li>▪ All internal combustion engine-driven construction equipment should be equipped with mufflers that are in good condition.</li> <li>▪ Backup beepers should be prohibited. Spotters or flaggers in clear view of the operator should be used in lieu of beepers to direct the backing operation of mobile equipment on the site per the requirements of Title 8, Section 1592 of the California Administrative Code.</li> <li>▪ "Quiet" gasoline powered compressors or other electric powered compressors should be used. Electric rather than gasoline or diesel powered forklifts should be used.</li> <li>▪ Welded rather than bolted steel constructions should be used when possible to minimize the use of impact wrenches.</li> <li>▪ A disturbance coordinator with detailed knowledge of the construction activities and authority to act regarding disturbances should be retained and identified. Disturbance coordinator responsibilities should include ongoing monitoring of project</li> </ul>		

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<p>compliance with required noise impact mitigation measures, identification of additional mitigation measures warranted to mitigate disturbances where possible, and taking constructive actions as necessary to minimize construction disturbances at adjoining occupied buildings.</p> <ul style="list-style-type: none"> <li>It is not possible to know in advance who will be bothered, and to what degree, by the various phases of demolition and construction adjacent to and within the existing hospital. It is, therefore, necessary for the contractor to be required within the contract documents to take those steps that are feasible to reduce the level of disturbance. This could include working multiple shifts at critical stages, with some work occurring at night, to reduce the duration of the noise impact.</li> </ul>		

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<b>HEALTH AND SAFETY</b>				
<i>Hazardous Building Materials</i>				
<u>Existing Materials. (HS Impact 1)</u> Implementation of the proposed Master Plan may involve expansion and/or demolition of portions of the Phase I building on the Main Campus Site, which is known to contain asbestos, and the 185 La Casa Via building on the La Casa Court Site, which also may contain asbestos. Non-friable asbestos can become friable in the process of removal, creating a potentially significant health hazard during expansion or demolition of older buildings.	S	Prior to approval of a Use Permit for any subsequent development within the Master Plan boundary involving demolition or renovation of existing buildings, require the applicant to retain a qualified environmental specialist to inspect the subject buildings for presence of asbestos and/or other hazardous building materials that would require special handling. If such materials are identified, require the materials to be managed in accordance with all applicable state and federal regulations.	Applicant, City	LS
<u>Introduced Materials. (HS Impact 2)</u> During construction in accordance with the Master Plan, construction workers may bring potentially hazardous materials, such as fuel, solvents, paints, and oils, onto the project site. These materials would represent a potentially significant health hazard if they are spilled or misused.	S	As a condition of all future project-related construction contracts, require the contractor(s) to develop a <i>hazardous materials management plan</i> that identifies (a) hazardous materials that would be temporarily stored onsite during construction activities, (b) storage and containment areas and methods, (c) responsible personnel and safety and emergency procedures in case of accidental releases or exposures, and (d) personnel training requirements. Require review and approval of the plan by the Contra Costa County Fire	Applicant	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		Protection District (CCCFPD) and/or the Contra Costa County Health Services Department, Division of Environmental Health.		
<i>Potential Soil/Groundwater Contamination</i>				
<u>Underground Storage Tanks. (HS Impact 3)</u> Building renovation or new construction on the Main Campus Site under the Master Plan has the potential to expose construction workers, the public, or the environment to contaminated soil or groundwater, if such conditions exist on the project site due to leakage from an existing underground diesel fuel storage tank on the Main Campus Site. The tank, while not currently known to be leaking, could develop leaks over time, allowing diesel fuel to escape into soils or groundwater.	S	As a condition of Master Plan approval, require the project applicant to indicate in text and map form the location of any existing underground storage tank(s) on the project site, and demonstrate compliance with applicable Regional Water Quality Control Board protocols for maintenance and remediation.	Applicant, City	LS
<i>SOILS, GEOLOGY, AND SEISMICITY</i>				
<u>Soil Conditions. (G Impact 1)</u> The Master Plan would allow construction of buildings and paved areas on moderately expansive clay surfaces that could cause slight differential movement of large building foundations and	S	At the time that a Use Permit application for subsequent development on any portion of the project site is submitted, require the project applicant to commission a preliminary report indicating whether the proposed development	Applicant, City	LS

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
cracking of concrete slabs and pavements during seasonal changes in soil moisture content. Such movement and resultant cracking of slabs and pavements could result in substantial and costly damage to onsite improvements.		location is suitable and appropriate from a geotechnical standpoint, for the proposed use.  At the time that a Use Permit application for subsequent development on any portion of the project site is submitted, require the project applicant to commission a site-specific geotechnical study prepared by a registered engineering geologist for proposed new construction that recommends proper foundation systems and proper subgrade treatment. At applicant expense, also retain a registered engineering geologist to conduct an independent review of the applicant's geotechnical study, and to recommend any revised or additional measures to ensure proper foundation design.		

## DRAINAGE AND WATER QUALITY

### Storm Drainage Impacts

<u>Municipal Storm Drainage System.</u> <b>(D Impact 1)</b> Development in accordance with the proposed Master Plan would increase the amount of impervious surface on the project site, thereby altering local drainage patterns and increasing the amount and rate of runoff flowing	S	To mitigate Master Plan impacts on the city's storm drainage system, require the following: <ul style="list-style-type: none"> <li>As a condition of any future subdivision map or Use Permit approvals for future development within the Master Plan</li> </ul>	Applicant, City	LS
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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
into the city's local storm sewer system. Development of the La Casa Court Site and 230 La Casa Via Site may contribute additional runoff to the portion of the system that drains into the San Carlos Drive storm sewer, which is already operating above capacity. The project thus has the potential to contribute to existing drainage problems in this area. The project may also increase runoff draining into portions of the system that have deteriorated due to sulphur infiltration from a local underground spring.		boundary, require submittal of <i>detailed drainage plans</i> to the city for the area to be developed. All onsite surface drainage shall be collected and conveyed in an adequately designed underground storm drainage system to an approved point of discharge in a manner approved by the City Engineer. The city may also require the applicant to prepare a study of the downstream drainage system if the project drainage plans propose alteration of the area tributary to existing drainage discharge points. The city may also require the applicant to contribute an in-lieu fee to be applied toward the upgrading of the system if warranted by the amount of runoff the project would contribute to the system.		
		<ul style="list-style-type: none"> <li>As a condition of future subdivision map or Use Permit approval within the Master Plan boundary, require an analysis of onsite private storm drainage lines that will receive project runoff to determine the extent of their deterioration due to <u>sulphur infiltration</u>. If city-maintained lines have to be replaced, the city shall require the project applicant to share in the cost of construction. The applicant's share of this cost would be</li> </ul>		

S = Significant  
LS = Less than significant  
SU = Significant unavoidable impact  
NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		calculated based on the quantity of flow from the project site as compared with the quantity from other properties. If public or private storm drainage lines have deteriorated due to sulphur infiltration and are inadequate to contain additional drainage from the project, the applicant shall pay the cost of replacement.		
<i>Water Quality Impacts</i>				
<u>Impacts During Construction. (D Impact 2)</u> Construction in accordance with the Master Plan is likely to involve substantial grading, particularly on currently undeveloped portions of the project site (e.g., the La Casa Court and 230 La Casa Via Sites). Although the site occupies gently sloping terrain, there is a threat of increased soil erosion from soil disturbance associated with construction on these sites. Site grading would remove the existing vegetative cover, exposing bare soil to increased erosion from rain. Eroded, when carried into surface waters, can trigger algal blooms that reduce water clarity, deplete oxygen, and create odors. Excessive sediment could also be deposited in onsite storm drains and downstream drainage	S	To mitigate impacts due to soil erosion during construction, require the applicant to comply with the San Francisco Bay Area Regional Water Quality Control Board's National Pollutant Discharge Elimination System (NPDES) Construction Storm Water General Permit Requirements. The applicant shall submit copies of the required Notice of Intent (NOI) and <i>Storm Water Pollution Prevention Plan</i> (SWPPP) to the City Engineer prior to construction on any portion of the project site, and implement the SWPPP during construction. The SWPPP shall, at a minimum, follow the State Water Quality Control Board's <u>California Storm Water Best Management Practices Handbook</u> (March 1993), the city's Grading and Erosion Control	Applicant, City	

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NA = Not applicable



Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
facilities, decreasing their capacity. Other construction activities, including vehicle maintenance, paving, concrete work, and use of construction materials such as paint and other petroleum-based products, may also produce pollutants that could enter the storm sewer system.		ordinances, and other generally accepted engineering practices for erosion control.  The preparer of the SWPPP shall consider including the following requirements: <ul style="list-style-type: none"> <li>▪ Leave existing vegetated areas undisturbed until construction of improvements is actually ready to commence</li> <li>▪ To the extent possible, schedule major site development work involving earth moving and excavation for the dry season. If grading is to be conducted in winter, an approved erosion control plan shall be implemented prior to October 15th. All finished grade slopes shall be protected from erosion.</li> <li>▪ Implement measures necessary to protect downstream storm drainage lines from sedimentation.</li> <li>▪ Use silt fencing where necessary to retain sediment on the project site.</li> <li>▪ Immediately revegetate or otherwise protect all disturbed areas from wind and water erosion upon completion of grading activities. Protect all finished grade slopes from erosion.</li> </ul>		

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Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p><u>Impacts From Project Operations. (D Impact 3)</u></p> <p>The quality of stormwater runoff from the project site would be expected to decline as a result of increased surface urban pollutants associated with the proposed medical center expansions (debris, landscaping fertilizers and pesticides, and road and automotive waste, etc.). These added pollutants could flow into the city's storm sewer system, and eventually into the San Francisco Bay, where they could contribute to a cumulative degradation of water quality.</p>	S	<p>To mitigate impacts of future project operations on water quality, require the applicant to submit copies of the Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) described in the mitigation for <i>D Impact 2</i> above to the City Engineer and implement the SWPPP in project operations.</p> <p>At a minimum, the SWPPP shall (a) identify specific types and sources of stormwater pollutants, (b) determine the location and nature of potential impact, and (c) specify appropriate control measures to eliminate any potentially significant impacts to receiving water quality from stormwater runoff. Control measures may include vegetated buffer strips, site development restrictions, public education, street/parking lot sweeping, and other design or source control management practices, as appropriate, to mitigate potential water quality effects.</p>	Applicant, City	LS

## AIR QUALITY

### Short-Term Construction Impacts

<p><u>Dust and Exhaust. (AQ Impact 1)</u> Master Plan buildout construction activities, such as excavation and grading operations, construction</p>	S	<p>Conditions of approval for individual construction impacts shall stipulate that project construction contracts include the following requirements:</p>	Applicant, City	LS
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S = Significant  
LS = Less than significant  
SU = Significant unavoidable impact  
NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>vehicle traffic and wind blowing over exposed earth, can be expected to generate exhaust emissions and fugitive particulate matter emissions that would affect local and regional air quality at various times during construction. The dry, windy climate of the area during the summer months creates a particularly high potential for dust generation when and if underlying soils are exposed to the atmosphere</p> <p>Construction dust has the potential for creating a temporary nuisance at nearby properties downwind of construction activity.</p>		<ul style="list-style-type: none"> <li>▪ Whenever possible, use dust-proof chutes for loading construction debris onto trucks.</li> <li>▪ Use watering to control dust generation during demolition of structures and break-up of pavement.</li> <li>▪ Suspend dust-producing activities during periods of high winds when dust control measures are unable to avoid visible dust plumes.</li> <li>▪ During the dry season (May-October), provide equipment and staffing for watering of all exposed or disturbed soil surfaces at least twice daily.</li> <li>▪ Water or cover stockpiles of debris, soil, sand or other materials that can be blown by the wind.</li> <li>▪ Require daily clean-up of mud and dirt carried onto paved streets from the site.</li> <li>▪ Cover or wet down any fine materials transported by truck to control dust.</li> <li>▪ Limit the speed of all construction vehicles to 15 miles per hour while travelling on unpaved surfaces.</li> </ul>		

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 NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		<ul style="list-style-type: none"> <li>Water all inactive portions of the site with an appropriate dust suppressant, and cover or seed these areas.</li> </ul>		
<u>Odor.</u> <b>(AQ Impact 2)</b> In addition, grading associated with the project could produce odors due to disturbance of underground sulphur springs that are known to exist in the project site vicinity. This odor, which would likely be a "rotten egg"-type smell associated with hydrogen sulfide, may represent a temporary nuisance during project construction.	S	Require the design and construction phases of Master Plan-related development projects to plan for the possibility of encountering sulphur spring odor during grading and other construction activities. Require any sulphur spring water encountered during project construction to be pumped out of construction areas and properly disposed of.	Applicant, City	LS

## VEGETATION AND WILDLIFE

### 230 La Casa Via Site

<u>Tree Impacts.</u> <b>(VW Impact 1)</b> Development on the 230 La Casa Via Site could result in removal of three very large, mature oaks in the center of the site, plus scattered oak saplings. The three mature oaks qualify as Highly Protected Trees under the city's Tree Preservation Ordinance, but are also fairly old, exhibit significant decaying and breaking branches, show poor vigor, and are generally in poor health. While their removal would require a city Tree Removal	S	Any and all oaks should be retained if possible, or their removal should be mitigated through native oak planting either onsite or in dedicated land nearby. Because of the very large size and great age of the three mature trees, their removal (if allowed pursuant to a Tree Removal Permit) will be conditioned upon specific mitigation measures which, based on the city's Tree Preservation Ordinance, would most likely consist of replacement planting with trees of	Applicant, City	LS
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NA = Not applicable



Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
<p>Permit, they are nearing the end of their natural life spans and no longer represent productive biotic resource features. Nevertheless, because of their size, age, and location adjacent to the Shell Ridge open space area, and the associated value of existing native tree cover for wildlife, removal of these three trees would represent a <i>potentially significant impact</i>.</p>		<p>equivalent value, or payment of an in-lieu fee of equal value.</p> <p>In addition, removal of the site's smaller oaks should be accompanied by one-to-one replacement with one- to five-gallon stock.</p> <p>Once the applicant has applied for Tree Removal Permits and the city's arborist has inspected the site, the city will determine if Tree Removal Permits can be approved for any or all of the three large oaks, and, if granted, the exact replacement or in-lieu fee requirements will be determined at that time.</p>		
<p><u>Other Impacts.</u> (VW Impact 2) A minor amount of general open foraging habitat for common wildlife species would be lost with development of the 230 La Casa Via Site, adjacent to the Shell Ridge open space area.</p>	S	<p>Mitigate the small incremental loss of onsite open grassland habitat (and possibly some oaks) due to Master Plan buildout through onsite or adjacent habitat enhancement.</p> <p>As part of the enhancement program, complete a revegetation or general tree planting effort along the site's southern edge. This would buffer the development site from the Shell Ridge open space area and new native vegetation to the edge of the undeveloped area. It is recommended that a strip of at least 25 feet along the southern site boundary be planted</p>	Applicant	LS

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NA = Not applicable

Impacts	Potential Significance Without Mitigation	Mitigation Measures	Mitigation Responsibility	Potential Significance With Mitigation
		with native oaks (valley oak and coast live oak), buckeye, California bay, and/or other native tree species (e.g., Douglas-fir, madrone, walnut) to create a wooded buffer and physical screening between the two land uses.		

## CULTURAL RESOURCES

Archaeological Resources. (**CR Impact 1**) The majority of the project site, including portions of the Main Campus Site, La Casa Court Site, and 230 La Casa Via Site, has previously been disturbed for site preparation and building construction, and no evidence of archaeologic resources has been recorded. However, given the close proximity of the project site to other identified archaeologic sites (CA-CCo-15), and the fact that in this area of Contra Costa County, two or three prehistoric village sites are often found clustered near each other, it is possible that grading and excavation for Master Plan building construction may encounter as-yet unrecorded archaeologic resources.

S

As a condition of approval for subsequent development projects under the Master Plan, require the applicant to retain a qualified archaeologist familiar with prehistoric archaeology in Contra Costa County to observe approved ground-disturbing activities and project site preparation (grading) activities, and to inspect the exposed ground surface and subsurface immediately following initial disturbance of the uppermost two feet of soil on any part of the project site. In the event that any indicators are discovered, follow the specific mitigation protocols identified in section IV.I.3 of this EIR.

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## D. SUMMARY OF ALTERNATIVES

### 1. Identified Alternatives

Chapter VI of this EIR contains an analysis of seven alternatives to the proposed project, including the following.

- **Alternative A: No Project.** Under this CEQA-required alternative, the project subareas would be left in their current condition with either medical or vacant uses.
- **Alternative B: Expansion Under Current Entitlements.** This alternative assumes full buildout of the project properties under the current development plans and entitlements approved in the past by the city (for the Main Campus and La Casa Court sites) and the county (for the 230 La Casa Via site), plus full buildout of the general-plan permitted medical office space designation at the 185 La Casa Via portion of the La Casa Court site. No changes are assumed for the Schulze property under this scenario because its development potential is currently limited by an open space easement.
- **Alternative C: Reduced Expansion and Envelope.** This alternative assumes development of the project subareas with a 25 percent reduction in the overall maximum permitted additional floor area (i.e., a maximum of 624,250 square feet of new development in-lieu of the proposed maximum of 833,000 square feet of new development), plus a 25 percent reduction to the proposed building envelope standards. No changes are assumed for the Schulze property under this scenario because its development potential is currently limited by an open space easement.
- **Alternative D: Mitigated Master Plan.** This alternative assumes a Master Plan that allows 833,000 square feet of new development as proposed by the applicant, but with incorporation into the Master Plan of the various mitigation measures recommended in this EIR. No changes are assumed for the Schulze property under this scenario because its development potential is currently limited by an open space easement.
- **Alternative E: Alternative Sites.** This alternative evaluates the feasibility of providing all or a portion of the project at an alternative site or sites in a manner that meets the basic project objectives. No changes are assumed for the Schulze property under this scenario because its development potential is currently limited by an open space easement.

### 2. Conclusions

CEQA guidelines stipulate that, *"If the environmentally superior alternative is the no project alternative, the EIR shall identify an environmentally superior alternative among the other alternatives."*<sup>1</sup> Of the various alternatives evaluated in this EIR other than the "no project," it has been determined based on the comparative environmental analysis in section VI of this

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<sup>1</sup>California Environmental Quality Act Guidelines, Section 15126(d).



EIR that **Alternative C: Reduced Expansion and Envelope** would result in the least adverse combination of environmental impacts and would therefore represent the "environmentally superior" alternative. It should also be noted that in keeping with the CEQA Guidelines, this "environmentally superior" alternative determination has not included consideration of such important "non-CEQA" (non-environmental) issues as landowner intentions and comparative economic feasibility.

## **E. MITIGATION IMPLEMENTATION**

For those mitigation measures identified in this EIR that are included as conditions of project approval, a mitigation monitoring program would be formulated by the city for use to ensure effective mitigation implementation. Implementation of most of the mitigation measures recommended in this EIR would be subject to effective monitoring through the city's normal General Plan Amendment, rezoning, prezoning, development agreement, architectural review, grading permit, building permit, and site inspection procedures. However, to satisfy State AB 3180, a documented record of mitigation implementation will be necessary. Chapter VIII of this EIR includes a suggested Mitigation Monitoring Checklist for city staff use in meeting the requirements of AB 3180; i.e., in establishing the "who, what, when, and how" aspects for each mitigation measure from this EIR that is ultimately required.

## **F. SUMMARY OF MEDICAL OFFICE MARKET CONSIDERATIONS**

In addition to the areas of environmental concern identified in section II.B above, Appendix B of this EIR includes a separate report prepared for the city by Bay Area Economics, urban economists, that describes the potential effects of the proposed Master Plan on market demands for the existing approximately 234,000-square-foot medical office building complex located directly to the southwest of the existing John Muir Medical Center (i.e., the "Shell Ridge medical office area"). The report indicates that, although the current Shell Ridge medical office vacancy rate of six percent is low compared to overall medical office market conditions in Walnut Creek, leasing agents have recently experienced difficulty leasing vacant medical office space in the area, sometimes in buildings which had been fully occupied since their initial lease-up. This market sluggishness is attributed partly to a trend toward more medical office group consolidation and sharing of administrative functions, as well as an increasing reluctance by physicians to make long-term lease commitments due to the uncertain future of the health care industry.

The study findings also suggest that the approximately 70,000 square feet of medical office space proposed in the JMMC Master Plan could offer a number of competitive advantages over the existing Shell Ridge area medical office space, and indicates that it may be difficult to replace existing medical tenants with general (non-medical) office tenants because of physical and market constraints. The study concludes that, if there is a desire to prevent an over-supply of medical office space in the Shell Ridge area, the JMMC Master Plan could include a



provision making any new on-campus medical office construction (in excess of a specified amount) to be contingent upon a demonstration by John Muir Medical Center that:

(1) existing Shell Ridge medical office space is not sufficient to meet anticipated JMMC needs, and/or (2) other components of the proposed JMMC expansion will increase the number of physicians and ancillary uses, such as labs, to a level requiring additional medical office space at or near JMMC.



### III. PROJECT DESCRIPTION

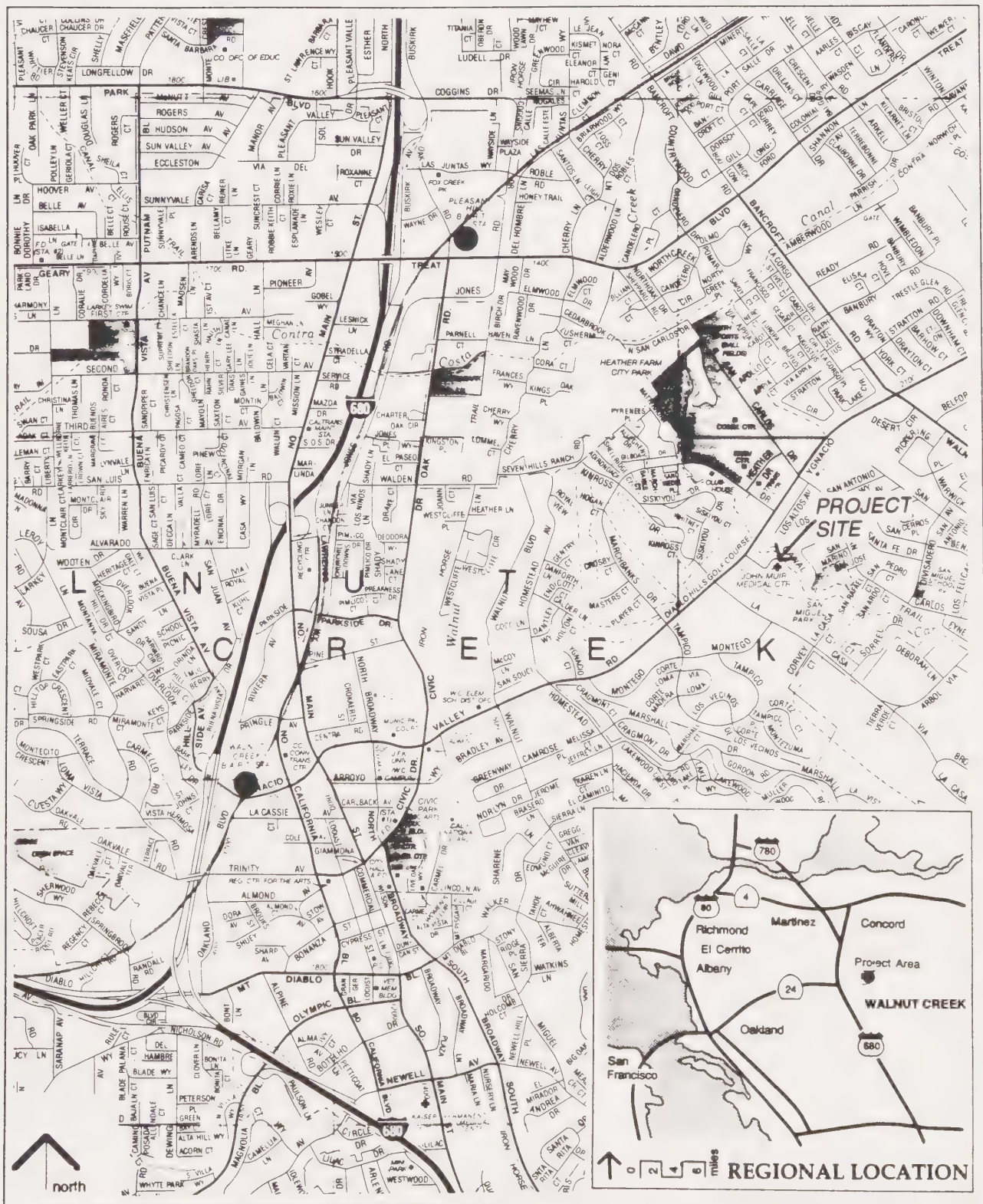


Figure 1

Source: Basemap copyrighted 1994 by the California State Automobile Association. Reproduced by permission.

## PROJECT LOCATION MAP

**JOHN MUIR MEDICAL CENTER MASTER PLAN EIR**

**City of Walnut Creek, CA**

Wagstaff and Associates



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### III. PROJECT DESCRIPTION

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This chapter describes the proposed actions or "project" addressed by this EIR. The project description is based on information contained in the development application submitted to the city by the project applicant, John Muir Medical Center (JMMC).

As stipulated by the California Environmental Quality Act (CEQA) Guidelines, the project description that follows has been detailed to the extent needed for adequate evaluation and review of environmental impacts. The description includes: (a) the location, boundaries, and local setting of the four project subareas which cumulatively make up the "project site"; (b) a historical overview of the site and project; (c) a statement of the basic project objectives sought by the applicant; (d) the project's physical and technical characteristics (i.e., proposed building envelopes, circulation layout, land uses, infrastructure improvements, and other pertinent aspects of the Master Plan); (e) the anticipated project phasing and construction schedule; and (f) the various permits and jurisdictional approvals required to allow construction of the project.

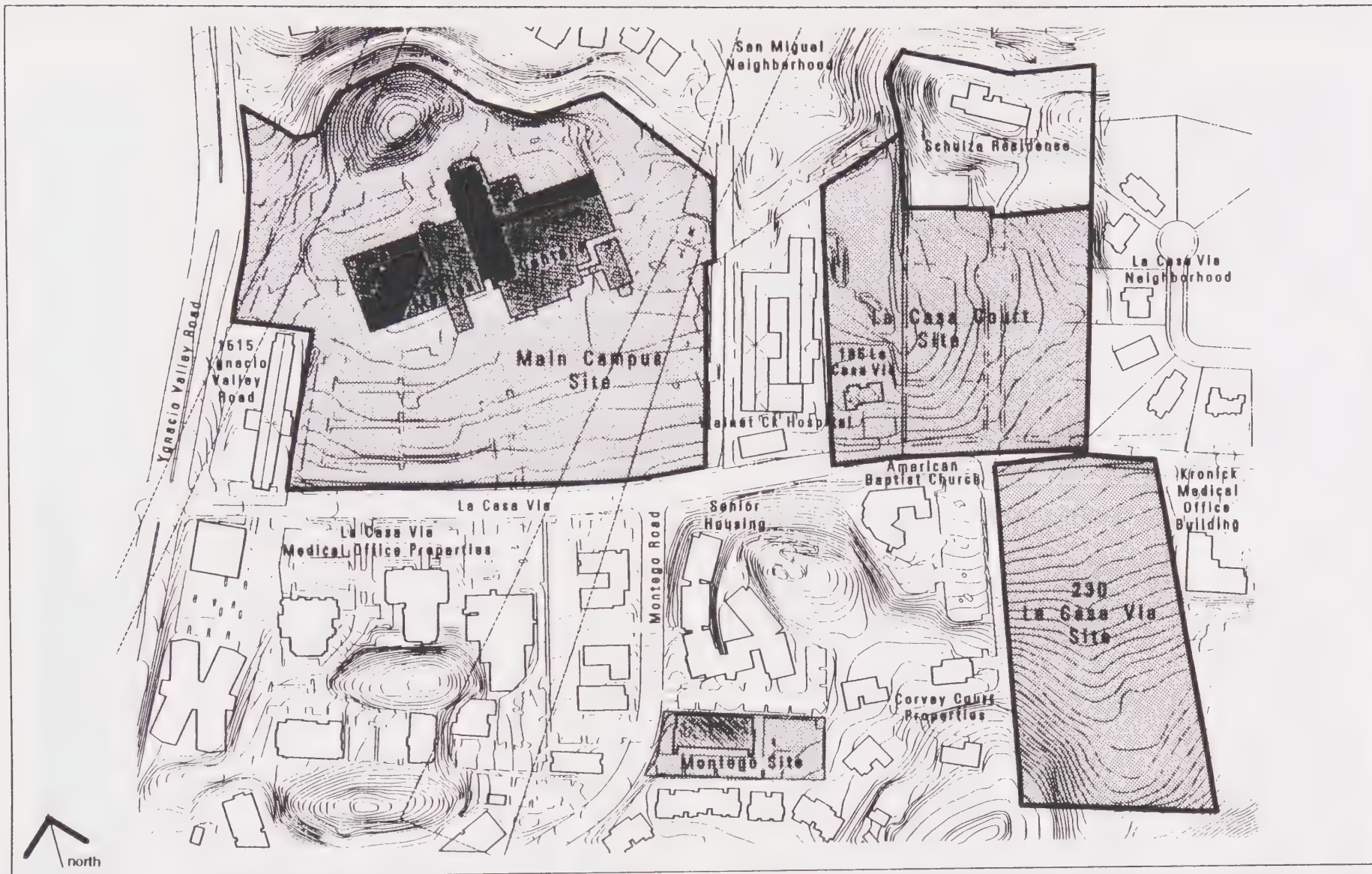
#### A. PROJECT SETTING

##### 1. Regional Location

The proposed project site is comprised of four adjacent subareas, including three located in the city of Walnut Creek and one in unincorporated Contra Costa County, in central Contra Costa County. The cities of Pleasant Hill and Concord are located to the north, the cities of Lafayette and Orinda are located to the west, the unincorporated community of Alamo and the town of Danville are located to the south, and unincorporated Contra Costa County and Mount Diablo State Park are located to the east. As illustrated on Figure 1, regional access to the project site is provided via Ygnacio Valley Road, a principal subregional arterial which extends from the project site to Interstate 680 (I-680). Ygnacio Valley Road also provides access to the project site from the city of Concord. State Highway 24 (SR 24), which provides regional access between the Walnut Creek area and other East Bay locations, intersects I-680 immediately south of the Ygnacio Valley Road interchange.

##### 2. Local Setting

As illustrated on Figure 2, the project site consists of a cluster of four separate properties off of La Casa Via near the La Casa Via/Ygnacio Valley Road intersection and in northeastern Walnut Creek and unincorporated Contra Costa County. The properties are bounded by a range of existing residential and medical uses, as follows:



#### LEGEND

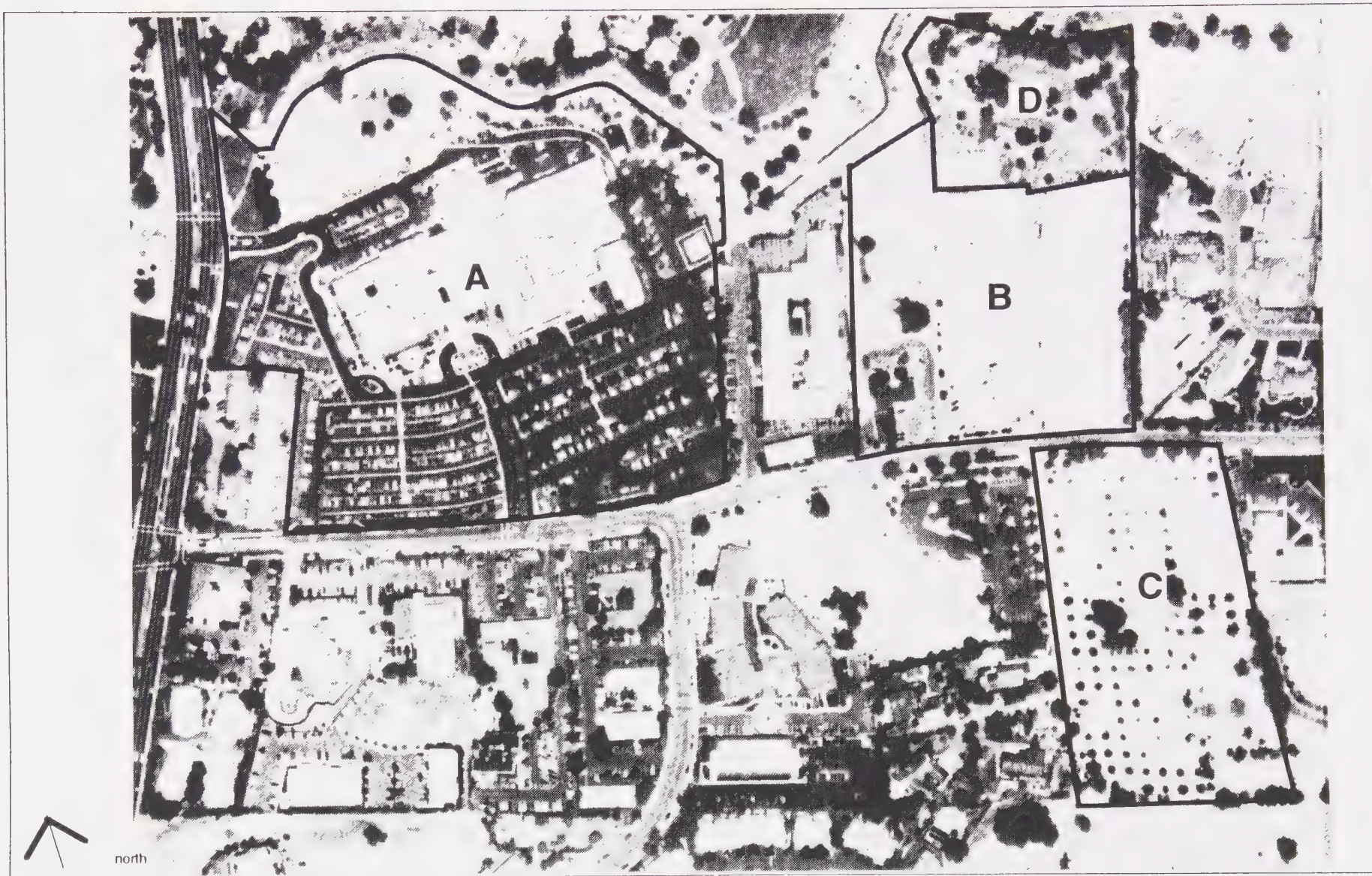
 PROPERTIES OWNED BY JOHN MUIR MEDICAL CENTER

 PROJECT SUBAREAS

SOURCE: Thistlethwaite Architectural Group

Figure 2  
**EXISTING PROJECT SITE  
AND VICINITY MAP**





#### LEGEND

— PROJECT SUBAREAS

**A** MAIN CAMPUS SITE

SOURCE: WAC Corporation

**B** LA CASA COURT SITE

**C** 230 LA CASA VIA SITE

**D** SCHULZE PROPERTY

Figure 3

## PROJECT SITE AND VICINITY PHOTOGRAPH

**JOHN MUIR MEDICAL CENTER MASTER PLAN EIR**

**City of Walnut Creek, CA**

Wagstaff and Associates



a. The Main Campus Site (1601 Ygnacio Valley Road). This 18-acre site, located within the Walnut Creek city limits, contains the existing 365,000-square-foot medical center and is bounded by: (1) Ygnacio Valley Road on the northwest; (2) the Ygnacio Canal (Contra Costa County Water District surface water conveyance) and San Miguel neighborhood on the northeast; (3) Walnut Creek Hospital, a psychiatric treatment facility, on the southeast; and (4) La Casa Via Road and the 1515 Ygnacio Valley Road medical office building on the southwest.

b. The La Casa Court Site (185 La Casa Via and the vacant La Casa Court subdivision). This 7.17-acre site, located within the Walnut Creek city limits, consists of two parcels containing vacant land, a cul-de-sac, and an approximately 2,000-square-foot single family home converted to medical office use. The two parcels which comprise this subarea are bisected by the Briones-Mt. Diablo trail, which is operated and maintained by the East Bay Regional Parks District. The site is bounded by: (1) Walnut Creek Hospital, the Ygnacio Canal, and San Miguel Park in the San Miguel neighborhood to the northwest; (2) the Schulze property and residence, a component of the project described under item d below, to the northeast; (3) the La Casa Via neighborhood on the southeast; and (4) the La Casa Via roadway and, on the opposite side of La Casa Via, the 230 La Casa Via Site to the southwest.

c. The 230 La Casa Via Site. This vacant 6.26-acre parcel, located outside the Walnut Creek city limits within unincorporated Contra Costa County, is bounded by: (1) the Briones/Mt. Diablo Trail, the Corvey Court roadway, the American Baptist Church, and single family homes to the northwest; (2) the La Casa Via roadway to the northeast; (3) a medical office building and the La Casa Via neighborhood to the southeast; and (4) the Shell Ridge Open Space and Briones/Mount Diablo Trail to the southwest.

d. The Schulze Property. This 2.66-acre parcel, located within Walnut Creek city limits, contains a single family home on a knoll and is bounded by: (1) the San Miguel neighborhood to the north and west, (2) the La Casa Via neighborhood to the southeast, and (3) the La Casa Court Site to the southwest.

### **3. Specific Site Characteristics**

The project site and its immediate vicinity are illustrated on Figures 2 and 3. The specific existing characteristics of each of the four separate properties comprising the 34.1-acre site are as follows:

a. Main Campus Site. The 18-acre Main Campus Site currently contains a 365,000-square-foot operational medical center. The facility's existing layout, circulation and topographic characteristics are described below.

(1) *General Layout*. The Main Campus Site is comprised of three main structures, including: the eight-story, 102,000-square-foot "Phase I Building" with a capacity of 124 inpatients; the three-story, 93,000-square-foot "Phase II Building" containing critical care nursing units, a





**Main Campus Site** looking north from La Casa Via.

clinical laboratory, an emergency room which functions as Contra Costa County's trauma center, and other functions; and the five-story, 170,000-square-foot "Phase III Building" containing, among other functions, outpatient facilities, a surgical suite, a birth center, inpatient nursing units, a health education center and a main lobby. The entire medical center has the capacity to serve approximately 350 inpatients. A grade-level helipad is also located at the northeastern corner of the site near the boundary with Walnut Creek Hospital and the San Miguel neighborhood. The helipad is primarily utilized for emergency transport of trauma care patients.

The Phase I, II, and III buildings are physically integrated both externally and internally. Although the architectural design of each building phase is stylistically different, the buildings appear as one structure located roughly at the center of the site and surrounded on three sides by the facility's 899-space surface parking lot. Landscaping in this parking lot consists primarily of trees at the outer perimeter and interspersed throughout the parking areas. The landscaped parking lot represents the primary open space feature of the Main Campus Site. The site also includes a lawn area at the Ygnacio Valley Road driveway entrance, and a small, undeveloped (naturally-vegetated) hill at the northwestern corner.

(2) *Circulation.* The Main Campus Site accommodates vehicular, pedestrian, and helicopter circulation. Vehicular access to the site is provided via a signalized driveway intersection that links the northwest corner of the site directly to Ygnacio Valley Road, and a main driveway off of La Casa Via. Both of these access points connect to an internal drive which loops around the medical center building, providing access to the main lobby, emergency room, loading and service entrances, and surrounding parking. The main lobby is also served by a separate vehicular entry loop. Emergency vehicles enter and exit the facility from the Ygnacio Valley Road entrance.

The primary on-site pedestrian circulation system is contained within the existing structures, which are linked by a series of internal corridors and elevators. Externally, a sidewalk surrounds the medical center campus.

Weather permitting, helicopters approaching the helipad are required to fly in a northeasterly direction over the Main Campus parking lot and medical office buildings southwest of La Casa Via. Leaving the facility, helicopters are required to follow the same flight path in a southwesterly direction, as weather permits. The Caltrans-approved flight pattern has been recently adjusted to divert helicopter traffic away from local residential uses. To transport helicopter-borne patients into the hospital, emergency personnel utilize the vehicular and pedestrian circulation area between the helipad and emergency room, which are located in close proximity to one another.

(3) *Topography and Drainage.* The Main Campus Site slopes downward from La Casa Via in a northeasterly direction. The northeastern corner is approximately 30 feet below La Casa Via. At the northwestern corner near Ygnacio Valley Road, the site contains a natural hillock which rises approximately 23 feet above the elevation of the adjacent internal loop road. Most of the Main Campus Site drains into either the Los Cerros Avenue/Los Altos Avenue municipal storm sewer or the Ygnacio Valley Road/Los Altos Avenue municipal storm sewer; runoff from the north side of the undeveloped hillock portion drains into Ygnacio Canal.

b. La Casa Court Site. The seven-acre La Casa Court site is primarily vacant; its existing layout, circulation, and topographic characteristics are described below.

(1) *General Layout.* The La Casa Court Site contains: (1) a 2,000-square-foot single-family house (185 La Casa Via) which has been converted to medical office use; (2) an 11-space surface parking lot for the medical office use; (3) an approximately 100-space "temporary" gravel parking lot for the use of JMMC employees; and (4) vacant land. The La Casa Court Site is served by the La Casa Court cul-de-sac, a local street which was constructed to provide access to an approved, unbuilt nine-lot residential subdivision. La Casa Court serves as the sole accessway between La Casa Via and the Schulze property. The La Casa Court Site also contains a paved segment of the East Bay Regional Park District's Briones-Mt. Diablo pedestrian/equestrian trail; the trail bisects the La Casa Court site in the northeasterly/southwesterly direction.



(2) *Circulation.* The medical office building at the La Casa Court Site is accessed via a driveway on La Casa Via. The La Casa Court cul-de-sac also connects to La Casa Via.

(3) *Topography and Drainage.* The La Casa Court Site has a downward slope from the La Casa Via roadway and the La Casa Via neighborhood toward the northern corner of the site, and a rise at the eastern corner of the site. As noted in subsection D.6.a of this chapter, the site currently drains into the San Miguel Park municipal storm sewer.

c. 230 La Casa Via Site. The existing characteristics of the 6.3-acre 230 La Casa Via Site are described below.

(1) *General Layout.* The site, which historically contained a residence and a walnut orchard, is currently vacant of any structures. It contains a large number of both native and non-native trees.

(2) *Circulation.* The site currently has no circulation system, although it is bounded on the southwest by the Briones-Mt. Diablo Trail.

(3) *Topography and Drainage.* The site slopes upward from La Casa Via, with the steepest portion at the rear, where the site elevation reaches 54 feet above La Casa Via. The site currently drains into the San Miguel Park municipal storm sewer.

d. Schulze Property. The existing characteristics of the 2.7-acre Schulze property are described below.

(1) *General Layout.* This property contains a one-story single family house at the crest of a knoll. Use of the knoll is governed by an open space easement, required as part of the previous La Casa Court Site subdivision approval, which limits development of the parcel to the current single family house plus minor accessory structures.

(2) *Circulation.* The Schulze property is accessed via a driveway which connects to the La Casa Court cul-de-sac.

(3) *Topography and Drainage.* The Schulze property knoll rises approximately 30 feet above the adjacent La Casa Court Site. The site currently drains into the San Miguel Park storm sewer.

#### 4. Existing Utilization and Employment

The existing John Muir Medical Center provides a full range of hospital-oriented medical services to people who work and live in Contra Costa County. The medical center employs approximately 695 full-time and 1,118 part-time personnel, including approximately 415 full-time physician, nursing and technical support staff. These numbers result in an existing so-

called "full time equivalent employee" (FTE) total of 1,318, a figure which is more fully explained in section IV.D of this EIR, Employment and Housing.

## **B. SITE HISTORY**

### **1. Main Campus Site**

A chronology of Main Campus Site development and approvals is contained in Table 2. The Main Campus Site was acquired for medical use in 1959. Since that time, construction has occurred within three phases. Two additional phases have also been approved by the city, but have not been constructed.

a. Phase I Building. Opened in 1965 under the name John Muir Memorial Hospital, this 102,000-square-foot, eight-story structure currently has a 124-inpatient capacity.<sup>1</sup>

b. Phase II Building. Opened in 1975, this three-story, 93,000-square-foot expansion included, among other functions, new critical care nursing units, a clinical laboratory, and a new emergency department. Also, with the construction of this addition, the architectural orientation of the medical center shifted from Ygnacio Valley Road to La Casa Via, the total capacity of the center was increased to approximately 260 inpatients, and the facility name became John Muir Medical Center.

c. Phase III Building. The five-story, 170,000-square-foot Phase III Building was opened in 1989. This expansion included new outpatient facilities, a surgi-center, a surgical suite, a birth center, inpatient nursing units, a health education center, and a new main lobby.

Phase III was approved by the city in 1986 pursuant to a Master Plan and associated Planned-Development District (P-D 1647). This approval included a condition (Condition 30 of P-D 1647) that all parking for the medical center must be provided onsite, and that the applicant must do the following with respect to providing this onsite parking:

- submit plans for a new 400-space parking structure (which was done);
- present a parking needs assessment to the city's Planning Commission every six months (later revised to one year); and
- construct a new parking structure if and when a parking shortage is determined to exist by the Planning Commission.

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<sup>1</sup>The eighth story of the Phase I Building is the roof-level stairway landing and enclosed mechanical equipment area. The main portions of the building are contained in stories one through seven.



Table 2

**MAIN CAMPUS SITE: HISTORICAL DEVELOPMENT AND PREVIOUS APPROVALS**

<u>Action</u>	<u>Year</u>	<u>City Approvals</u>
<i>Site acquired for medical use.</i>	1959	N/A
<i>Phase I Building Construction.</i> (eight-story, 102,000-square-foot hospital with a 124-inpatient capacity)	1964-65	Use Permit
<i>Phase II Building Construction.</i> (three-story, 93,000-square-foot expansion which increased inpatient capacity to approximately 260 patients)	1974-75	Planned Development District Rezoning, Design Review
<i>Phase III Building Construction.</i> (five-story, 170,000-square-foot expansion which increased inpatient capacity to approximately 350 patients)	1988-89	Master Plan, Use Permit, Planned Development District Rezoning, and Design Review approvals; certification of EIR
<i>Phases IV and V Approvals</i> (Two- and three-story medical buildings with on-site parking)	Not constructed	Approved in 1986 pursuant to Phase III Master Plan; each phase requires separate Use Permit, Design Review, and environmental review.

SOURCE: JMMC; City of Walnut Creek Community Development Department; Wagstaff and Associates.



**Main Campus Site** looking northeast from the parking lot. The Phase III building is visible to the left, the Phase II building is visible in the foreground to the right, and the Phase I building is visible in the background at the center of the photo. Mount Diablo is visible in the background on the right.

Parking demand studies have been prepared by JMMC and reviewed by the city's Planning Commission at the required intervals since the 1989 opening of Phase III. To date, the Planning Commission has not required that a parking structure be constructed.

d. Phases IV and V. The Master Plan and P-D District for Phase III also included conceptual approval of Phases IV and V on the Main Campus Site, although these phases would be subject to future additional environmental review and Use Permit approvals when their details were known. The Phase IV approval provides for construction of a three-story, 400-space parking structure and a five-story, 86,000-square-foot medical building. The Phase V approval provides for construction of a three-to-four-story medical office building over one level of parking, and a two-story parking structure. JMMC currently maintains the entitlements to build Phases IV and V.

## **2. La Casa Court Site and Schulze Property**

A chronology of past development approvals and activities on the La Casa Court Site and Schulze Property development and approvals is contained in Tables 3 and 4.

The portion of this site located at 185 La Casa Via contains a single-family house constructed in 1958. This house was purchased by JMMC in 1979 and converted to medical use in 1991. Other than this change of use, no development activity has occurred at 185 La Casa Via portion of the site since JMMC's purchase.

The remaining portion of the La Casa Court Site (e.g., the area to the east containing a cul-de-sac) was subdivided in 1980 for single-family residential development. The subdivision followed the 1978 city adoption of Specific Plan Number 6, which established residential density and development standards for the subdivided portion of the site, the adjacent Schulze Property, and the incorporated area to the east of the project. Although the cul-de-sac access road was constructed pursuant to the approved subdivision Final Map, no homes were ever built. Other than the construction of a gravel parking lot, no modifications have been made to this portion of the La Casa Court Site since it was purchased by JMMC.

## **3. 230 La Casa Via Site and Related Settlement Agreement**

A chronology of 230 La Casa Via Site development and approvals is contained in Table 5.

This site was purchased in 1989 by JMMC from Perma-bilt Homes after the La Casa Via Neighborhood Association (LCVNA) filed a lawsuit challenging Contra Costa County approval of a 196-unit congregate care facility on this property. The resulting *La Casa Via Neighborhood Settlement Agreement* between JMMC, the LCVNA, Contra Costa County, and Perma-bilt Homes established the following:

Table 3

LA CASA COURT SITE: HISTORICAL DEVELOPMENT AND PREVIOUS APPROVALS

<u>Action</u>	<u>Year</u>	<u>Approvals</u>
<i>Construction of single-family house at 185 La Casa Via</i>	1958	Building Permit (County)
<i>Approval of Specific Plan 6, which establishes standards for an area including La Casa Court</i>	1978	Specific Plan
<i>Approval of P-D District for La Casa Court</i>	1979	Rezoning/Design Review
<i>Approval of Subdivision for La Casa Court</i>	1980	Final Map
<i>Rezoning of 185 La Casa Via to Commercial</i>	1979	Rezoning
<i>Purchase of 185 La Casa Via by JMMC</i>	1979	N/A
<i>Conversion of 185 La Casa Via to Medical Use</i>	1991	Use Permit/Design Review

SOURCE: JMMC; City of Walnut Creek Community Development Department; Wagstaff and Associates.



**La Casa Court Site** looking northeast from La Casa Via. The Schulze property is in the background. The La Casa Via neighborhood is visible to the right.



Table 4

SCHULZE PROPERTY: HISTORICAL DEVELOPMENT AND PREVIOUS APPROVALS

<u>Action</u>	<u>Year</u>	<u>City Approvals</u>
<i>Construction of single family house</i>	1949	Building Permit (County)
<i>Open space easement required by city; parcel subdivided from remainder of La Casa Court Site</i>	1980	Final Map

SOURCE: JMMC; City of Walnut Creek Community Development Department; Wagstaff and Associates.

Table 5

230 LA CASA VIA SITE: HISTORICAL DEVELOPMENT AND PREVIOUS APPROVALS

<u>Action</u>	<u>Year</u>	<u>County Approvals</u>
<i>Construction of single-family house</i>	1950	Building Permit
<i>Approval of 196-unit congregate care facility</i>	1988	Rezoning, General Plan Amendment, Development Plan, and Tract Map; certification of EIR
<i>La Casa Via Neighborhood (LCVNA) Settlement Agreement</i>	1989	County signed settlement agreement with LCVNA, JMMC, and Perma-bilt Homes agreeing to master plan process.
<i>Development Agreement between JMMC and Contra Costa County</i>	1989	County signed development agreement with JMMC agreeing to master plan process.
<i>Purchase by JMMC</i>	1990	N/A
<i>Single-family house demolished</i>	1991	Demolition Permit

SOURCE: JMMC; City of Walnut Creek Community Development Department; Wagstaff and Associates.





**230 La Casa Via Site** looking south from La Casa Via. Corvey Court is on the right. The current alignment of the Briones-Mt. Diablo Trail follows the left side of Corvey Court.

- JMMC would initiate a new (the current) Master Plan process with the city of Walnut Creek that would include the La Casa Court and 230 La Casa Via sites. This Master Plan process would contain a request to pre-zone the unincorporated 230 La Casa Via site, and, upon approval of the Master Plan, would be followed by a petition to annex the 230 La Casa Via site to the city.
- JMMC and the LCVNA mutually agreed to support lower-intensity medical center-related uses at the La Casa Court and 230 La Casa Via sites.
- JMMC and Contra Costa County agreed to execute a development agreement with regard to the 230 La Casa Via Site and the related Master Plan issues.

In a letter separate from the *LCVNA Settlement Agreement*, the city of Walnut Creek also agreed not to require a new parking structure at the Main Campus Site until completion of the new Master Plan process.

#### **4. October 1991 Master Plan Draft**

In 1990, JMMC initiated a Master Plan process pursuant to the terms of the *LCVNA Settlement Agreement*. In 1991, a draft of this Long-Range Campus Master Plan was completed and, in anticipation of city review, preliminary meetings were held with the LCVNA to determine neighborhood concerns. This 1991 Master Plan version included proposals for specific buildings on the three JMMC-owned properties. However, JMMC subsequently placed this building-specific Master Plan approach on hold in response to pending and anticipated changes in the health care industry which JMMC believed had the potential to make obsolete many of the facilities contained in the plan. LCVNA submitted a critique of the 1991 Master Plan to JMMC in 1993, after the Master Plan effort had been placed on hold.

This critique, prepared by David Gates and Associates, urban designers and landscape architects, included a number of urban design suggestions related to the 1991 Master Plan.

## **5. Current Master Plan Proposal**

Subsequently, on April 10, 1995, JMMC filed the current Master Plan application with the city of Walnut Creek. A supplement to this application was also filed on December 2, 1995. The applicant states that the contents of the April 10 and December 2 drafts were formulated in response to (1) the changing nature of the health care industry and (2) the urban design recommendations contained in the 1993 report by David Gates and Associates.

### **C. BASIC PROJECT OBJECTIVES**

The basic objectives of the proposed Master Plan, as stated verbatim by the applicant,<sup>1</sup> are as follows:

1. Secure for John Muir Medical Center in a reasonable manner and for the long term, through legislative decisions by the Walnut Creek City Council at this time, a demonstrable land use ability to expand the existing John Muir medical campus to a total, including existing facilities, of up to 1.2 million square feet. The presence of such a secure land use opportunity is crucial to allow John Muir to maintain in the future its preeminence as a regional and community medical center in Walnut Creek.
2. Enhance John Muir's ability to provide new medical campus facilities and services as soon as possible after the need for such facilities and services is identified. Accomplish that by establishing, at this time, tailored development standards and focused permit process requirements for future physical improvements at John Muir. In that way, John Muir can reasonably rely on a relatively short planning and design review process for approval of such new buildings, building additions and other campus improvements as soon as possible after their specific need is identified.
3. Maintain for John Muir in any Master Plan approvals reasonable flexibility as to the type and location of new facilities for medical center uses in order to more effectively meet and respond to future community and regional health care needs.
4. Establish development thresholds at the campus when various circulation, urban design and landscape improvements must be provided, as new medical center buildings and additions are constructed, and otherwise provide a reasonable long term framework to address campus impacts as they may occur.

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<sup>1</sup>Mark Armstrong, Gagen, McCoy, McMahon & Armstrong, written communication, February 9, 1996.

5. Allow John Muir to address the understandable concerns of the adjoining neighborhoods:  
(a) to provide for a long term medical center master plan on which they may reasonably rely, and  
(b) to reasonably reduce residents' uncertainty about the future overall potential for campus changes. These objectives are also consistent with the intent and provisions of the *LCVNA Settlement Agreement*. Also address through any Master Plan approvals the principle in that agreement that lower intensity uses and building envelopes be focused at the La Casa Court and 230 La Casa Via Sites and, in turn, higher intensity uses and building envelopes be provided at the Main Campus Site beyond that which currently exists.
6. Allow John Muir to focus the Main Campus Site in the future around a new access route ("Medical Center Way") which, if other property is acquired, would eventually replace existing La Casa Via as the primary access route to the medical center and would link the Main Campus Site with the La Casa Court Site.

#### **D. PROPOSED MASTER PLAN**

##### **1. Overall Development Concept**

a. Land Use. As shown in Table 6, the project would permit a wide range of medical and ancillary uses to be constructed within the three project subareas. The applicant has stated that these flexible land use guidelines are necessary to meet unforeseen future needs in the health care industry. With the exception of certain high intensity uses (helipad and emergency room facilities) that would not be permitted on the La Casa Court and 230 La Casa Via Sites, the location of the various permitted uses among the three principal sites is neither specified nor limited by the Master Plan. However, all of the permitted uses would be confined to the specific *building envelope* and *design standards* proposed for each of the three project subareas, including greater setback requirements and an overall smaller permitted building envelope for the La Casa Court and 230 La Casa Via sites. The applicant also proposes more strict lighting standards for the La Casa Court and La Casa Via sites.

The permitted land uses each fall into a Master Plan defined category of "hospital/medical center," "medical office," or "continuing care." At buildout, the Master Plan would allow a maximum of 74 percent hospital/medical center uses, nine percent medical office uses, and 20 percent continuing care uses.

b. Circulation. As shown in Figures 4 and 5, the project would change the physical orientation of the JMMC from La Casa Via to a new road, Medical Center Way, to be located on an east-west axis in line with the existing Main Campus buildings. Medical Center Way would in turn be connected to La Casa Via and Ygnacio Valley Road by a new internal north-south road. Medical Center Way would become the central spine and principal organizing element of the JMMC physical plant.



Table 6  
MASTER PLAN LAND USE CLASSIFICATIONS

<u>Use Category</u>	<u>Description of Allowable Uses</u>	<u>Lower-Intensity Site Requirements</u>
<b><i>Primary Uses (Healthcare)</i></b>		
<u>Hospitals/Medical Center Uses</u>		
<b>Hospitals</b>	Health facilities which are licensed under State of California Title 22, Division 5, Chapter 1 (General Acute Care Hospitals), Chapter 2 (Acute Psychiatric Hospital), Chapter 9 (Psychiatric Health Facilities), and Chapter 11 (Chemical Dependency Recovery Hospital)	
Inpatient care	Health and health care for the human body, including overnight convalescence, for medical, surgical, psychiatric, emergency, and similar forms of procedures. Included are emergency care and urgent care, preventive and elective care, diagnosis and treatment, and invasive and non-invasive procedures, traditional and alternative medicine.	
Outpatient care	Health and health care for the human body, on less than 24-hour per day basis, for medical, surgical, psychiatric, emergency, and similar forms of procedures. Included are emergency care and urgent care, preventive and elective care, diagnosis and treatment, and invasive and non-invasive procedures, traditional and alternative medicine, whether or not licensed under Title 22, Division 5.	
<b>Clinics</b>	Primary care, specialty, and psychology clinics which are licensed under State of California Title 22, Division 5, Chapters 7, 7.1, and 7.2	
<b>Emergency Medical Care</b>	Emergency medical service and/or trauma center on a 24-hour basis	Not permitted
<u>Continuing Care Uses</u>		
<b>Skilled Nursing Facilities</b>	Health facilities or a distinct part of a hospital which is licensed under State of California Title 22, Division 5, Chapter 3, Skilled Nursing Facilities	
<b>Intermediate Care Facilities</b>	Facilities licensed under State of California Title 22, Division 5, Chapter 4, Intermediate Care Facilities	
<b>Residential Care Facilities</b>	Facilities licensed under State of California Title 22, Division 6, Chapter 8, Residential Care Facilities for the Elderly	
<b>Adult Day Health Facilities</b>	Medical and non-medical care and supervision of adults and elderly persons on a less than 24-hour per day basis, as licensed under State of California Title 22, Division 5, chapter 10, Adult Day Health Centers	



Table 6 (continued)

<u>Use Category</u>	<u>Description of Allowable Uses</u>	<u>Lower-Intensity Site Requirements</u>
<b>Adult Day Health Facilities</b>	Medical and non-medical care and supervision of adults and elderly persons on a less than 24-hour per day basis, as licensed under State of California Title 22, Division 5, Chapter 10, Adult Day Health Centers	
<b>Home Health Agencies</b>	Facilities licensed under State of California Title 22, Division 5, Chapter 6, Home Health Agency	
<u>Medical Office Uses</u>		
<b>Medical Offices</b>	Offices for professionals providing health and health care services	
	<b><i>Accessory Uses--Support</i></b>	
<b>Ambulance Services</b>	Emergency medical care and transportation, excluding maintenance of vehicles	Not permitted, except as related to other uses
<b>Business and Professional Offices</b>	Professional, executive, management and administrative offices related to health and healthcare services provided onsite	
Data Center	Facilities used primarily for collection, management, storage, and dispersal of electronic data	
<b>Distribution and Storage Facilities</b>	Storage and warehousing, shipping and receiving related to health and healthcare services provided onsite	Limited to area necessary to support Primary Use(s)
<b>Heliports</b>	Helipad classification only, enabling takeoffs and landings by helicopters transporting patients and healthcare personnel to the site	Not permitted
<b>Maintenance and Service Facilities</b>	Corporation yard and equipment service serving other primary and accessory uses, including, but not limited to, contractor work areas, storage of building materials to be incorporated into facilities, and maintenance of equipment	Limited to area necessary to support Primary Use(s)
<b>Parking Facilities</b>	Parking lots and structures to accommodate staff, professionals, patients, and visitors accessing the site and/or campus	

Table 6 (continued)

<u>Use Category</u>	<u>Description of Allowable Uses</u>	<u>Lower-Intensity Site Requirements</u>
<b>Recycling Facilities</b>	Collection and processing of recyclable materials other than hazardous wastes	Limited to area necessary to support Primary and Accessory Use(s)
<b>Research and Development Services</b>	Facilities engaged in scientific and medical research, including limited product testing, including pharmaceutical research laboratories, but excluding manufacturing and medical testing	
<b>Utilities, Minor</b>	Utility facilities necessary to the support of the uses on the site, including emergency power generation, switching facilities, water storage facilities, waste-water treatment and holding, communications equipment	
<b><i>Accessory Uses--Service</i></b>		
<b>Banking Facilities</b>	Automated teller machine installation(s)	
<b>Child Day Care Facilities</b>	Non-medical care protection and supervision to children under 18 years of age, on a less than 24-hour basis, as a service to professionals, staff, and patients onsite	
<b>Cultural Facilities</b>	Libraries and educational systems serving the health and healthcare institution, its staff, professionals, patients and visitors	
<b>Eating and Drinking Establishments</b>	Facilities serving food and beverages to professionals, staff, patients and visitors onsite and/or campus, with or without outdoor seating	
<b>Educational Facilities</b>	Educational facilities for professional, staff, visitor, patient and community education of health and health-related issues	
<b>Food and Beverage Sales</b>	Specialty or convenience foods for purchase by those working onsite, and onsite for hospital functions	
<b>Personal Improvement Services</b>	Facilities providing instructional services in health and health-related areas, including, but not limited to, crafts, dance, exercise or aerobic studios, and diet centers	
<b>Religious Assembly</b>	Facilities for religious worship for visitors and patients to the site	

Table 6 (continued)

<u>Use Category</u>	<u>Description of Allowable Uses</u>	<u>Lower-Intensity Site Requirements</u>
<b>Retail Sales/Rentals</b>	Retail sales and rentals of merchandise incidental to health and health related services, including gifts, flowers, pharmacy items, incidental office supplies and greeting cards, and clothing	
	<b><i>Accessory Uses-Public</i></b>	
<b>Public Transit Services</b>	Facilities for embarking and disembarking transit service users accessing the site	Permitted on La Casa Court Site only
<b>Utilities, Major</b>	Existing electrical transmission line easement (Main Campus Site)	Not permitted

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SOURCE: Thistlethwaite Architectural Group; Gagen, McCoy, McMahon & Armstrong; March 1996.

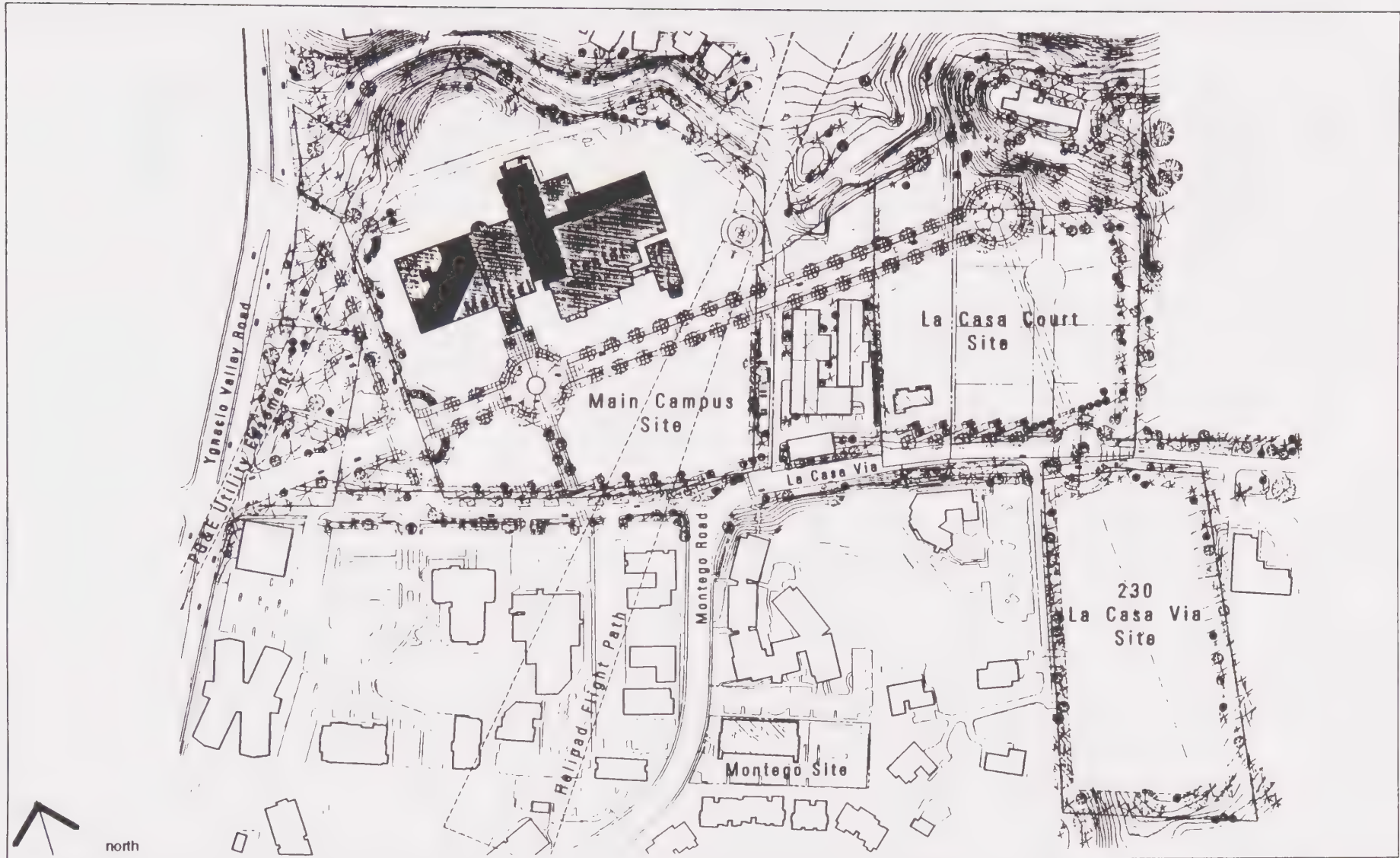


Figure 4  
**PROPOSED MASTER PLAN--  
 ACQUISITION OPTION  
 BUILDOUT**

SOURCE: Thistlethwaite Architectural Group



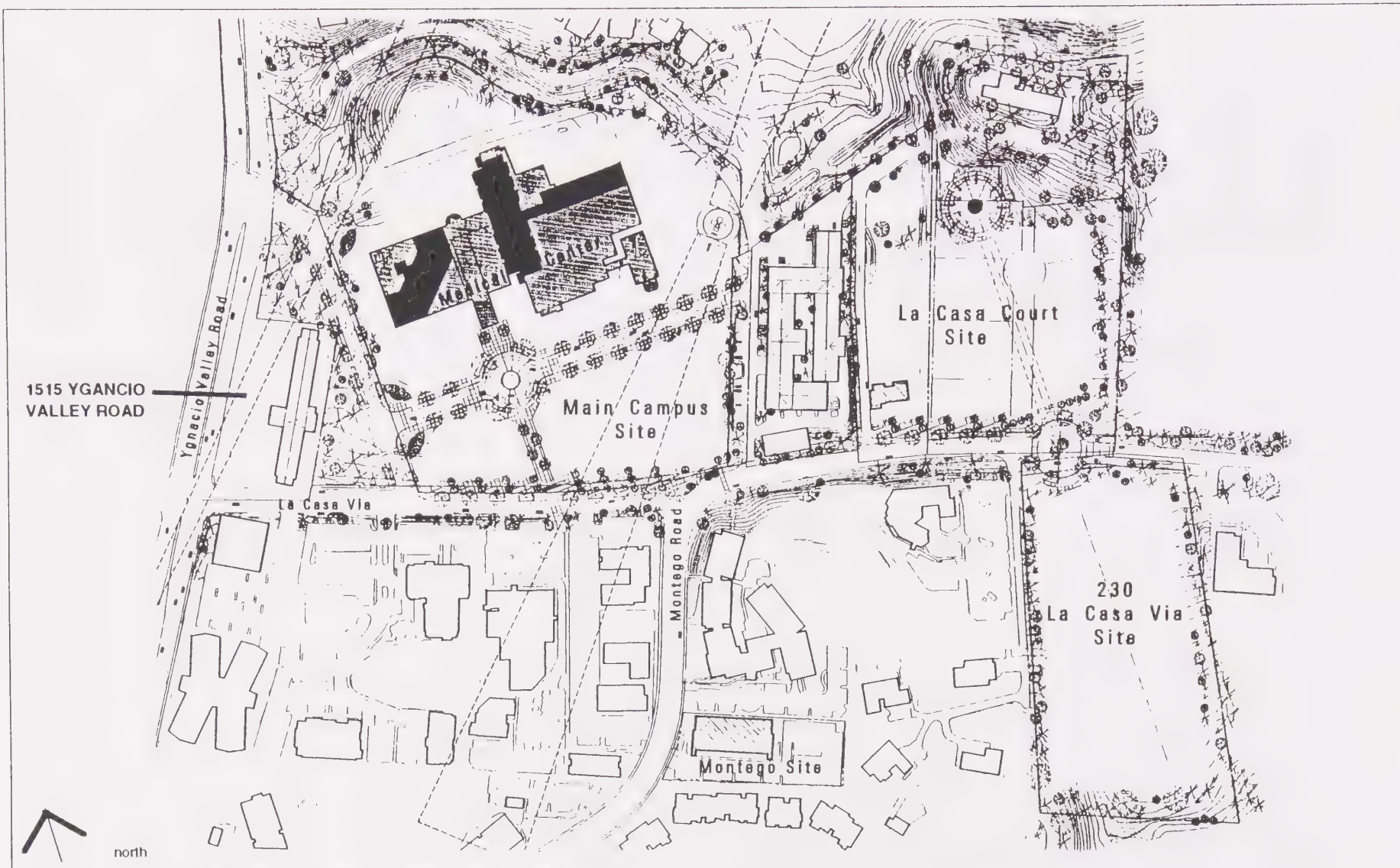


Figure 5  
**PROPOSED MASTER PLAN--  
 NON-ACQUISITION OPTION**  
**PARTIAL BUILDOUT**

SOURCE: Thistlethwaite Architectural Group

Implementation of the overall circulation pattern within and between the project subareas would be linked to the total development completed and the associated circulation improvements required with each "development unit" (see 1.f below). Full completion of the main circulation component of the project, the new Medical Center Way, would require JMMC acquisition of the property at 1515 Ygnacio Valley Road and removal of the existing office building on that parcel, and JMMC acquisition of a portion of the Walnut Creek Hospital property and demolition of a portion of the Walnut Creek Hospital structure, as shown on Figures 4 and 5. The Master Plan would *require* that Medical Center Way must be fully extended from the La Casa Court Site to Ygnacio Valley Road only after 250,000 square feet of new construction has been completed at the Main Campus Site, although its full extension *may* be completed prior to that time. Since full construction (extension) of this key Master Plan element would be contingent upon JMMC acquisition of all of the 1515 Ygnacio Valley Road property and a portion of the Walnut Creek Hospital property, and such acquisition is not assured, the proposed Master Plan and this EIR address two internal JMMC circulation scenarios--a scenario with and a scenario without JMMC acquisition of these two properties.

(1) Acquisition Option. The Master Plan stipulates that if and when more than 250,000 square feet of new floor area is constructed on the Main Campus Site (i.e., approximately half of the 535,000 square feet of new floor area permitted on the Main Campus Site), Medical Center Way would be required to extend from Ygnacio Valley Road to the rear third of the La Casa Court Site, and the existing La Casa Via connection to Ygnacio Valley Road would be eliminated (see Figure 4). Because full extension of Medical Center Way from Ygnacio Valley Road to the La Casa Court Site would require JMMC to purchase the 1515 Ygnacio Valley Road property and a portion of the Walnut Creek Hospital property, this scenario referred to as the "Acquisition Option." This option would also include a north-south road that would link the existing JMMC entrance driveway on Ygnacio Valley Road with La Casa Via. The existing JMMC driveway on La Casa Via would be closed.

By eliminating direct access to La Casa Via from Ygnacio Valley Road, and narrowing the width of La Casa Via in front of the Main Campus Site, the primary access route to the La Casa Via residential neighborhood would become Montego Road. The existing Montego Road/La Casa Via connection would be modified to better accommodate smooth traffic flow to and from the La Casa Via neighborhood.

(2) Nonacquisition Option. If no more than 250,000 square feet were built at the Main Campus Site, the Master Plan would not require JMMC to extend Medical Center Way the full length from Ygnacio Valley Road to the La Casa Court Site (see Figure 5). Under this scenario, Medical Center Way would only provide for internal circulation on the Main Campus Site, plus access to a service road connection to the La Casa Court Site around the back of the Walnut Creek Hospital. Because it would not require purchase of any new properties by JMMC, this scenario is referred to as the "Nonacquisition Option."

With the exception of a narrowing (elimination of street parking lanes) of La Casa Via and construction of new landscaping areas along the side of this street, La Casa Via would retain



its current configuration and access to Ygnacio Valley Road. However, this scenario would still include the reconfiguration of the Montego/La Casa Via intersection to direct the main traffic flow to Montego, which combined with the narrowing of La Casa Via between Ygnacio Valley Road and Montego is intended to facilitate use of Montego by La Casa Via neighborhood traffic similar to the Acquisition Option. Also similar to the Acquisition Option, vehicular access to the Main Campus and Medical Center Way would be provided by a new north-south roadway connection between the existing Ygnacio Valley Road driveway and La Casa Via and the existing driveway entrance on La Casa Via would be closed. However, the principal circulation feature of the Acquisition Option, the direct Medical Center Way connection to both Ygnacio Valley Road and the La Casa Court Site, would be excluded under this Non-Acquisition Option.

(3) Pedestrian Circulation. As shown in Figures 4 and 5, the Master Plan under both the Acquisition and Non-Acquisition options includes a new north-south axis pedestrian access way from the lobby of JMMC to La Casa Via and the La Casa Via Medical Office Properties on the opposite side of La Casa Via. Pedestrian connections between the three project subareas under the Acquisition Option would be provided along sidewalks on either side of Medical Center Way and along the north-south connecting roadway through the La Casa Court Site, and via the sidewalks on either side of La Casa Via. Under the Nonacquisition Option, pedestrian connections between the three project subareas would be provided via the La Casa Via sidewalks, Medical Center Way and the rear roadway connecting Medical Center Way and the La Casa Court Site, and the north-south roadway connecting the La Casa Court Site and the 230 La Casa Via Site.

Under both options, the Briones-Mt. Diablo Trail, which currently goes through the La Casa Court Site and along the southwestern edge of the 230 La Casa Via Site, would be rerouted to the northeastern perimeter of the La Casa Court and La Casa Via sites (see Figure 36 in section IV.E of this EIR, Parks and Recreation).

c. Urban Infrastructure and Amenities. As shown in Figure 4, the Acquisition Option would include the following infrastructure improvements and common amenities:

- a landscaped open space area at the 1515 Ygnacio Valley Road site to visually enhance the new Medical Center Way intersection at this location and provide for better visual recognition of the JMMC from Ygnacio Valley Road;
- street trees and pedestrian pavement treatment on La Casa Via and Medical Center Way, including a wider landscaped area along both sides of the narrowed La Casa Via segment northwest of Montego Road;
- traffic circles along Medical Center Way in front of the JMMC lobby and at its La Casa Court terminus, and on La Casa Via between the La Casa Court and 230 La Casa Via sites at the entrance to the La Casa Via neighborhood;

- a landscaped gateway element at the entrance to the La Casa Via neighborhood and a landscaped buffer separating the La Casa Court and 230 La Casa Via sites from the La Casa Via neighborhood; and
- a landscaped buffer northeast of the Main Campus Site, between the medical center and the San Miguel neighborhood.

Figure 5 shows that the urban design characteristics of the Nonacquisition Option are identical to the Acquisition Option, with the exception that (1) the landscaped open space area near the Ygnacio Valley Road intersection would be significantly smaller in scope, and (2) the La Casa Court traffic circle would not connect to Medical Center Way.

d. Development Units. Under both the Acquisition and Nonacquisition Options, the actual **implementation (phasing)** of the various Master Plan identified urban infrastructure and amenities would be linked to completion of various "development units"--i.e., increments of total additional floor area constructed--as shown in Figures 6 and 7. The following implementation sequence is indicated by Figure 7:

- The landscaped buffers between the Main Campus and the San Miguel neighborhood and between the La Casa Court Site and the La Casa Via neighborhood would be required at the completion of the Master Plan process, whether or not any new floor area is constructed.
- Additional landscape buffering would be required only if new floor area were added to either the La Casa Court or 230 La Casa Via site.
- The remaining improvements would be tied to the development unit thresholds for the Main Campus Site: increments of 50,000 square feet for the first three development units (a-c on Figure 7), an increment of 100,000 square feet for the fourth development unit (d on Figure 7), and a final increment of 285,000 square feet for the final development unit (e on Figure 7).
- New floor area of any increment at either the La Casa Court or La Casa Via site would also constitute a "development unit" with associated improvements required commensurate with construction. Four of the six "Roadway and Street Improvements" (improvements to existing roadways) and one of the five "Internal Site Improvements" (internal circulation improvements and the extension of Medical Center Way) would be required if *any* development took place at the La Casa Court or 230 La Casa Via Sites.

The Master Plan would not require the project to be built out in phases that match the development units. Rather, the Master Plan would allow JMMC to carry out development in phases of any size, provided that (1) proposed construction does not exceed the overall Master Plan specified *building envelope standards*, and (2) if and when development unit thresholds are reached, the corresponding infrastructure improvements are made concurrent with the proposed construction.



e. Design Guidelines and Standards. The Master Plan application also includes a proposed set of design standards and guidelines for the required amenities and for the permitted buildings. The Master Plan *design standards* are defined as "specific, stipulated, quantifiable requirements that establish overall order, firm dimensions, and clearly required conditions."

The Master Plan *design guidelines* are defined as "characteristics which, although qualitative in nature, establish essential elements of scale, proportion, intensity and density, and pattern and texture."<sup>1</sup> (These standards and guidelines, and their visual and urban design implications, are further discussed in section IV.B of this EIR, Visual and Urban Design Factors.)

f. Parking. The Master Plan does not include a detailed discussion of parking issues. In particular, the Master Plan does not specify a standard for the number of new spaces to be provided. However, the applicant's proposed P-D zoning does include a general requirement which, with each individual future application for specific development under the Master Plan, would require submittal of a *parking study* analyzing the number of spaces necessary to be provided based on the mix of uses proposed, the demand for parking existing at that time, the amount of existing parking spaces to be removed as a result of the project, etc. Under these proposed P-D zoning provisions, the city would be permitted to require a parking standard not exceeding 2.9 spaces per 1,000 square feet of floor area.

Also, the project does not specify the location of new on-site parking facilities, although some figures in the design guidelines show areas where parking could possibly be placed.

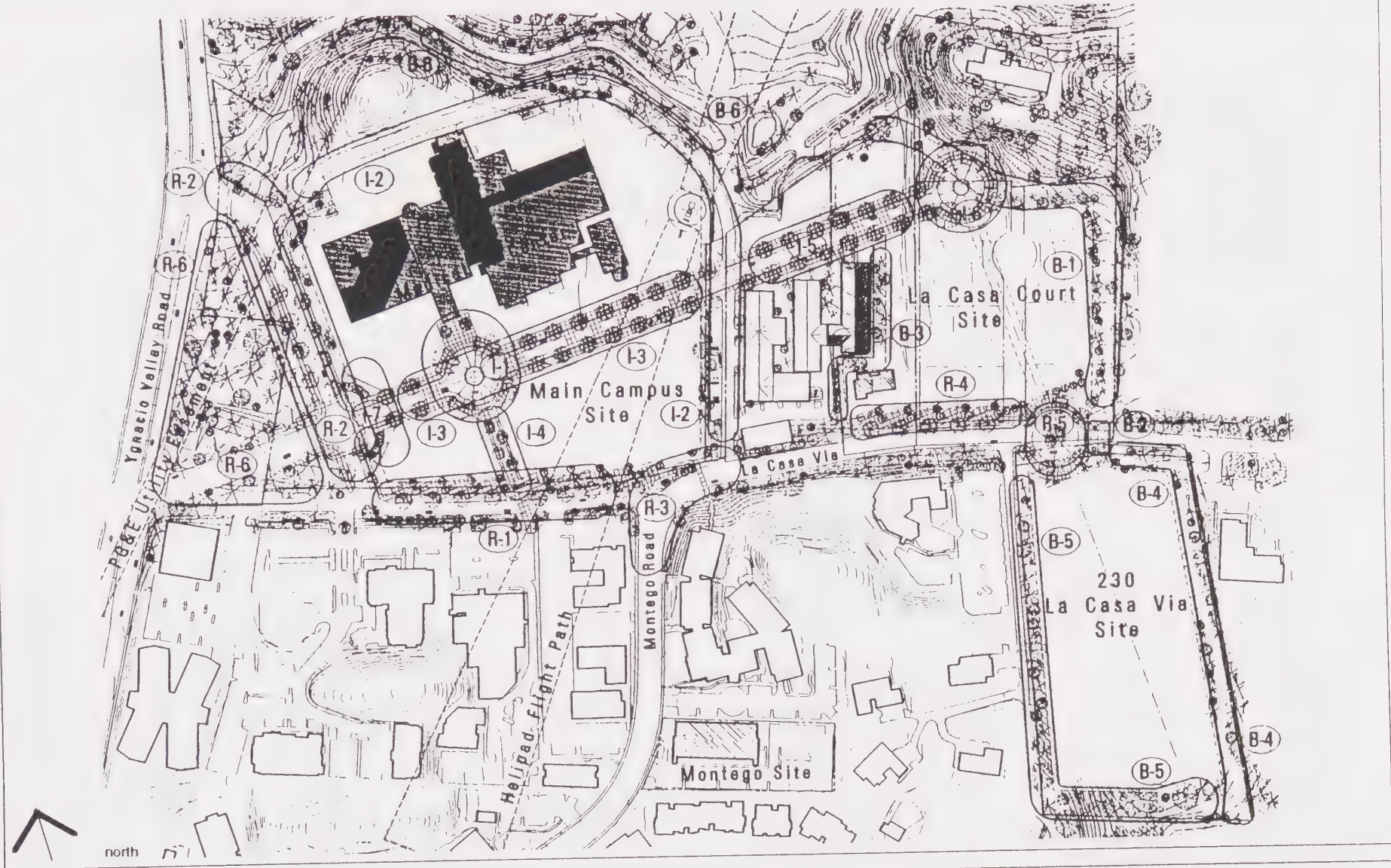
## **2. Main Campus Site Development Concept**

a. Building Intensity. The Master Plan would allow a maximum lot coverage of 50 percent and a maximum Floor Area Ratio (FAR) of 1.15 (not including parking structures) on the Main Campus Site. The isometric diagram on Figure 8 shows that maximum allowable *building envelope* heights would vary from a low of two stories (25 feet) on the northern side of Medical Center Way and the southwestern side of La Casa Via, to a maximum of six stories (89 feet) on the northeastern portion of the property. Figures 9 through 11 illustrate how new medical building and parking structure construction could fit within this building envelope.

b. Circulation. Circulation within the Main Campus Site would be centered on Medical Center Way, which would connect to an additional internal north-south road linking the site's existing Ygnacio Valley Road access with La Casa Via. Service vehicles would utilize the existing service road at the rear of the campus.

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<sup>1</sup>John Muir Medical Center, Campus Master Plan Application, *Supplement 1, Chapters 10 and 11*, December 2, 1995.



NOTE: See Figure 7 for key to required improvements.

Figure 6  
**PROPOSED MASTER PLAN--  
 DIAGRAM OF IMPROVEMENTS**

SOURCE: Thistlethwaite Architectural Group

**JOHN MUIR MEDICAL CENTER MASTER PLAN EIR**

**City of Walnut Creek, CA**

Wagstaff and Associates



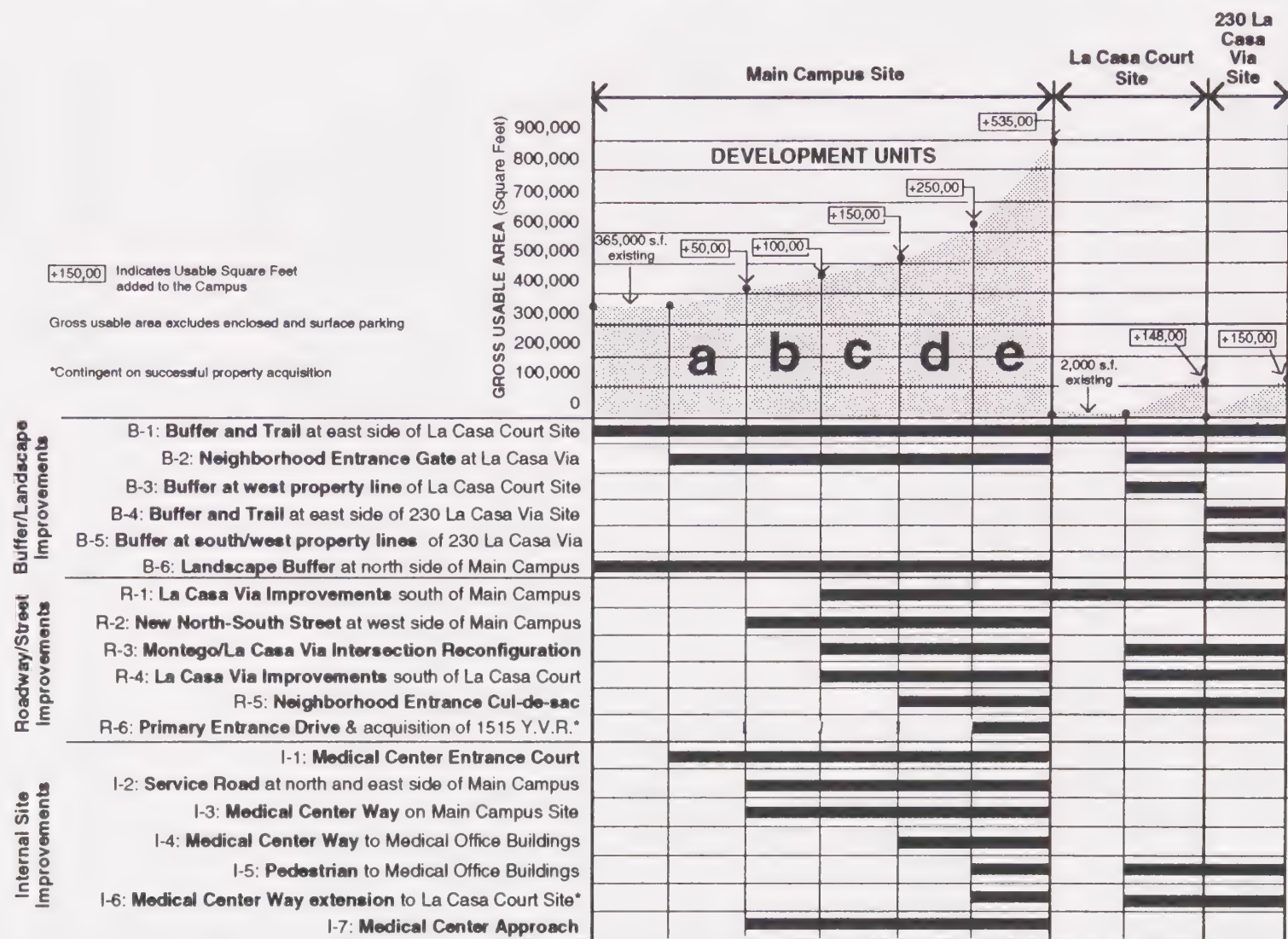


Figure 7

**PROPOSED MASTER PLAN--  
DEVELOPMENT UNIT CHART**

SOURCE: Thistlethwaite Architectural Group December 2, 1995

c. Amenities. The primary, organizing urban design elements for the Main Campus Site would be: (1) the landscaped Medical Center Way oriented east-west, parallel to the main medical center structure and on axis with Mt. Diablo; and (2) the landscaped traffic circle on Medical Center Way, which would both serve as an entrance court to the medical center and as a node for the proposed pedestrian path between the Main Campus Site and the Shell Ridge medical office properties.

d. Land Use. Any of the land uses contained in Table 6 would be permitted at the Main Campus Site.

#### **4. La Casa Court Site**

a. Building Intensity. The Master Plan would allow a maximum lot coverage of 30 percent and a maximum Floor Area Ratio (FAR) of 0.48 on the La Casa Court Site. Figure 8 shows that the maximum allowable *building envelope* height on this site would be two stories (25 feet).

b. Circulation. Under the Acquisition Option, internal circulation at the La Casa Court Site would be focused on Medical Center Way, although vehicular circulation (including service vehicles) would also be possible through the surface parking lot on the site, linking Medical Center Way and La Casa Via. A pedestrian axis down the center of the site would also link Medical Center Way and La Casa Via. Under the Non-Acquisition Option, the proposed north-south road from La Casa Via to the rear of the property would be the primary internal circulation route, although some form of secondary service road connection would be required between the La Casa Court Site and the Main Campus Site at the rear of Walnut Creek Hospital. The Master Plan stipulates that all service vehicles would access the La Casa Court Site via this rear connection to a parallel road on the western side of the site.

c. Amenities. The main urban design elements for the La Casa Court Site would be the landscaped, east-west Medical Center Way link to the Main Campus Site (under the Acquisition Option only), the landscaped traffic circle at the north of the site, the north-south axis roadway connection to La Casa Via, and the landscaped traffic circle at this La Casa Via intersection.

d. Land Use. The land uses permitted at the La Casa Court site are listed in Table 6.

#### **5. 230 La Casa Via Site**

a. Building Intensity. The project would allow a maximum lot coverage of 30 percent and a maximum Floor Area Ratio (FAR) of 0.55 on the 230 La Casa Via Site. Figure 8 shows that the maximum *building envelope* height at this site would be two stories (29 feet).



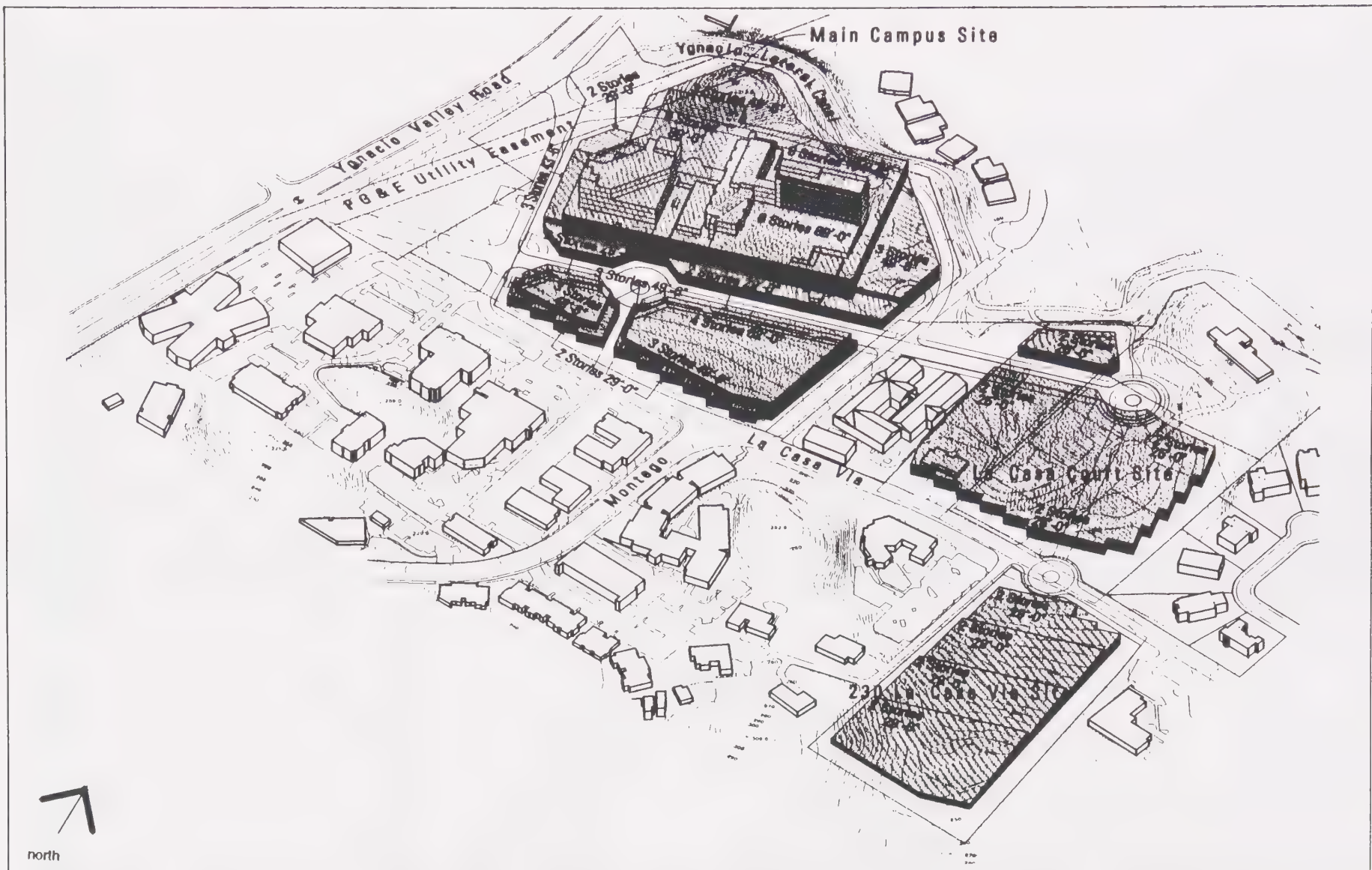


Figure 8  
**PROPOSED MASTER PLAN--PERMITTED  
 BUILDING VOLUME ISOMETRIC**

SOURCE: Thistlethwaite Architectural Group

**JOHN MUIR MEDICAL CENTER MASTER PLAN EIR**

City of Walnut Creek, CA

Wagstaff and Associates

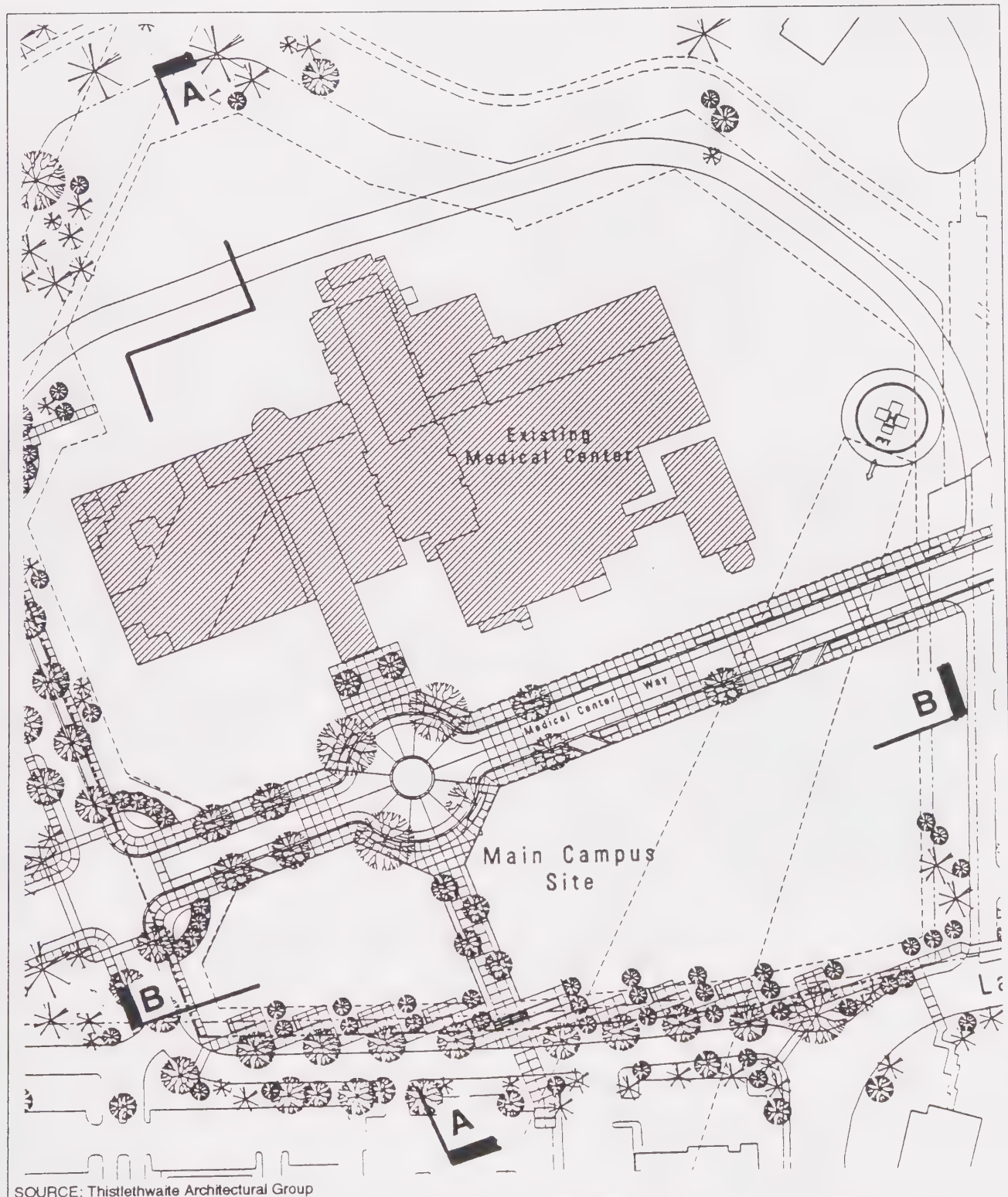
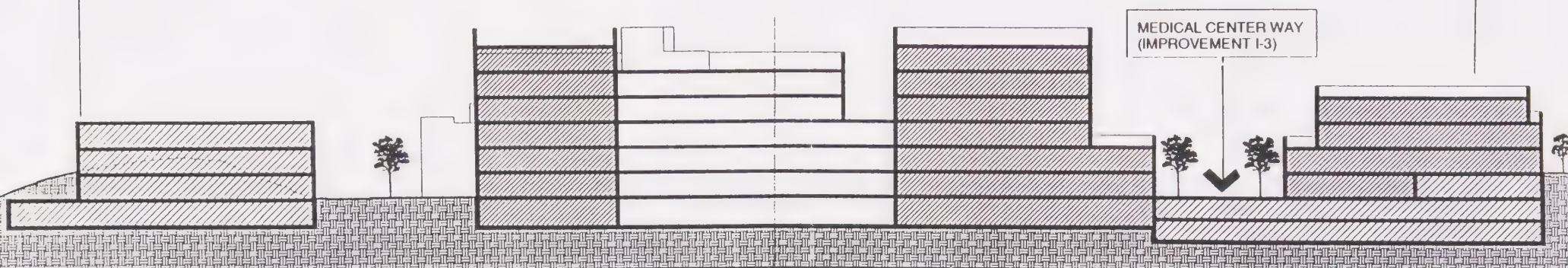


Figure 9  
**PROPOSED MASTER  
 PLAN--SECTION KEY**





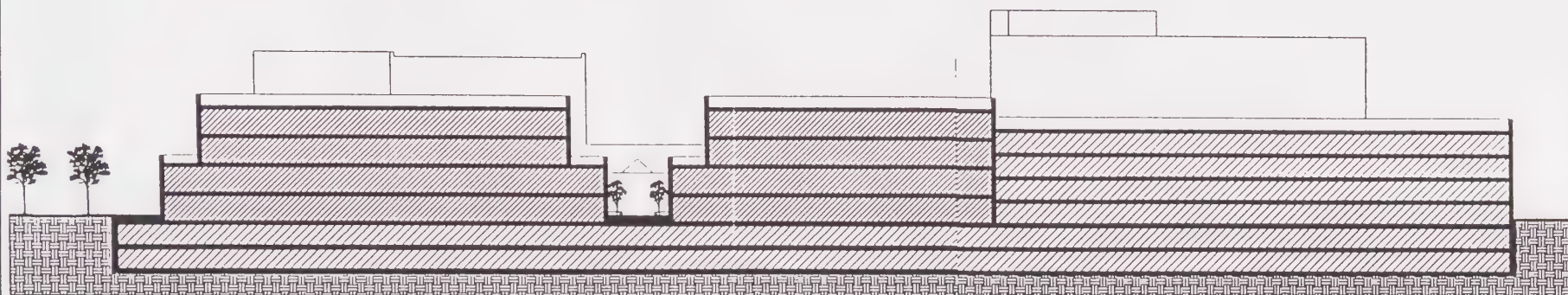
#### LEGEND

- EXISTING
- NEW PARKING
- NEW BUILDING

NOTE: This cross section represents one possible building volume which would be permitted under the Master Plan. The actual building envelope and associated uses would vary.

SOURCE: Thistlethwaite Architectural Group

Figure 10  
**PROPOSED MASTER PLAN--  
SECTION A**



#### LEGEND

-  EXISTING
-  NEW PARKING
-  NEW BUILDING

NOTE: This cross section represents one possible building volume which would be permitted under the Master Plan. The actual building envelope and associated uses would vary.

SOURCE: Thistlethwaite Architectural Group

## Figure 11 PROPOSED MASTER PLAN-- SECTION B



b. Circulation. Internal circulation on the La Casa Via Site would be via a new north-south non-through road down the center of the site (not shown on Figures 5, 6 or 8). A separate service road would be located along the west portion of the site.

c. Amenities. The main urban design element linking the La Casa Via Site to the other medical center subareas would be the landscaped traffic circle on La Casa Via.

d. Land Use. The land uses permitted at the 230 La Casa Via Site are listed in Table 6.

## **6. Schulze Property**

Although the Master Plan includes a General Plan Amendment to designate the Schulze Property as *Hospital* (HO), the proposed Planned Development District (P-D) development standards would require that this site remain in residential use unless the P-D is amended at some future date. There is an existing conservation easement on the site that stipulates the use shall remain as single family.

## **7. Changes in Site Utilization and Employment Characteristics**

As described under subsection C of this chapter, Basic Layout Objectives, the Master Plan intent is to continue providing a full range of medical services to people who live and work in Contra Costa County. As discussed in section IV.D of this EIR (Employment and Housing), full build out of the three principal sites under the proposed Master Plan is anticipated to result in an employment increase from the current total of approximately 1,318 to a build-out total of 4,645 full-time-equivalent (FTE) employees.

## **8. Proposed Utilities**

a. Storm Drainage. The Master Plan does not include either a detailed or conceptual drainage plan for any of the project subareas.

b. Water Supply. Water service to the project would be provided by the East Bay Municipal Utility District via connections to existing water mains on Ygnacio Valley Road, La Casa Via, and Los Cerros Avenue.

c. Sewer. Wastewater service to the project would be provided by the Central Contra Costa Sanitary District. The Main Campus Site is currently connected to an existing sewer main on Los Cerros which is near capacity. In addition to this main, the Master Plan expansions could possibly be connected to other sewer mains in the vicinity.

d. Other Utilities. Existing telephone, electricity, natural gas, and other utilities serving the JMMC would be expanded as necessary to serve the additional development permitted under the proposed Master Plan.

## **E. PROPOSED PROJECT PHASING AND CONSTRUCTION SCHEDULE**

The project has no phasing time line requirements other than the 20-year life of the Master Plan. The applicant has not indicated a preliminary schedule for development. For purposes of this analysis, Master Plan approval is assumed to be granted by the city in 1996, and total buildout is conservatively assumed to have occurred by the end of the 20-year Master Plan period; i.e., by in 2016.

Construction of individual Master Plan identified infrastructure improvements and other onsite amenities would be linked to floor area increase (square footage) increments referred to in the Master Plan as "development units." These floor area linked improvement requirements are described above under subsection III.D.1.d.

## **F. REQUIRED PROJECT APPROVALS**

As used in this EIR, the terms "JMMC Master Plan," "Master Plan," and "project" refer to all aspects of the current Master Plan proposal, including all necessary local, state and federal approvals, entitlements, and permits that may be required for development of the proposed project.

In addition to approval of the Master Plan and related design guidelines by the city's Design Review Commission, JMMC has requested city council and planning commission approval of a General Plan Amendment, a Specific Plan Amendment, a rezoning/prezoning, and a development agreement. The applicant also intends to request annexation approval from the Contra Costa County Local Agency Formation Commission (LAFCO) for the 230 La Casa Via Site annexation to the city after Master Plan approval. In addition, the trail re-alignment aspect of the project will require review and approval by the East Bay Regional Park District. Certain State of California approvals will also be required to implement the Master Plan. These various required local and state approvals are further described below.

### **a. Design Review Commission**

Prior to review of the Master Plan by the Walnut Creek Planning Commission and City Council, the applicant must obtain approval of the Master Plan and associated design guidelines from the city's Design Review Commission.

### **b. General Plan Text and Map Amendment**

The applicant proposes a General Plan Amendment (GPA) to: (1) redesignate the La Casa Court Site from *Single-Family Low* (SFL) to *Hospital* (HO), (2) redesignate the 230 La Casa Via Site from *Single-Family Very Low* (SFVL) to HO, (3) redesignate the Schulze property from SFL to HO, and (4) increase the maximum FAR allowed at the Main Campus Site from 0.60 to 1.15. Because the text of the Walnut Creek General Plan also refers to the date of

adoption of Specific Plan Six, and this specific plan is proposed to be amended as noted under III.F(b) below, the date of specific plan adoption referenced in the general plan will also need to be amended.

**c. Specific Plan Text and Map Amendment**

Specific Plan No. 6 currently calls for low density residential uses for the eastern portion of the La Casa Court Site. The project will require an amendment to the text and map of Specific Plan No. 6 to allow low-intensity medical uses on the La Casa Court Site.

**d. Rezoning/Prezoning**

A new Planned Development (P-D) District city zoning designation is proposed for each of the JMMC-owned properties and the Schulze property. The P-D provisions would officially establish the development standards, and set forth other conditions of approval, consistent with the new Master Plan. As called for in the *LCVNA Settlement Agreement*, the Main Campus Site and the La Casa Court Site would be rezoned to P-D District, and the presently unincorporated 230 La Casa Via Site would be prezoned to the P-D District, pending its annexation by the city (see subsection e which follows).

**e. Development Agreement**

A Development Agreement between JMMC and the city is also proposed as a Master Plan implementation tool. The applicant-proposed Development Agreement would serve the P-D standards for a 20-year term, with automatic 5-year extensions that could be terminated by either party.

**f. Annexation**

Pursuant to the *LCVNA Settlement Agreement*, JMMC intends to request annexation of the currently unincorporated 230 La Casa Via Site, after the city has granted the aforementioned approvals. In addition to review and approval of the prezoning and proposed annexation by the Walnut Creek Planning Commission and City Council, the annexation would require approval by the Contra Costa County Local Agency Formation Commission (LAFCO) based on the following:

1. *Petition for Annexation.* A petition shall be submitted to the city of Walnut Creek with the following information:

- *Statement of Uninhabitation.* To satisfy State Government Code Section 56046, a statement that the annexation territory (the 230 La Casa Via Site) is uninhabited must be prepared.
- *Statement of Nature of and Reasons for the Annexation Proposal.* To satisfy State Government Code Section (SGCS) 56652(b), a *statement of the nature of the proposal*

*and reasons for the proposal* will be prepared, including: (a) the location, general plan designations, and general geographic and land use characteristics of the territory, (b) a description of the proposed conversion of open space lands to other uses (to comply with SGCS 56377), and (c) a listing of the reasons for the request.

- *Maps and Other Supporting Documentation.* Maps will be compiled to delineate the proposed annexation area boundary.
- *Legal Description of Annexation Area Boundaries.* A companion *survey map* and legal description of the annexation area boundaries must be prepared by a licensed surveyor or civil engineer.

2. *Plan for Providing Services to the Affected Territory.* To satisfy SGCS (56653), a *plan for providing services to the affected territory* will also be required.

#### g. Trail Realignment

Prior to issuance of a use permit for Master Plan development at the La Casa Court or 230 La Casa Via Site, the Master Plan proposed realignment of the Briones-Mt. Diablo Trail would require approval by the Board of Directors of the East Bay Regional Parks District.

#### h. Other State of California Required Approvals

Any future hospital building construction within the Master Plan area would require review by the State of California's Office of Statewide Health Planning and Development. Future JMMC building modifications would also be subject to inspection by the State Department of Health, Division of Licensing and Certification, which issues and maintains the hospital's license to operate.



#### IV. SETTING, IMPACTS, AND MITIGATIONS



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## A. LAND USE

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This EIR section discusses a number of land use issues related to the proposed project, including impacts of the Master Plan expansions on the existing onsite medical uses, and the compatibility of the proposed land use changes with surrounding land uses. (Project relationships to Walnut Creek 1989 General Plan land use policies are described in section V of this EIR.)

### 1. SETTING

#### a. Citywide Land Use

The project subareas are located near the Ygnacio Valley Road/La Casa Via intersection, northeast of the Los Lomas and Homestead/Cherry Lane neighborhood districts, in an area identified in the Walnut Creek 1989 General Plan as the "Ygnacio Valley Neighborhood District." This neighborhood is the largest of ten distinct neighborhoods identified in the general plan.

The Ygnacio Valley neighborhood district includes a portion of unincorporated Contra Costa County land within the city of Walnut Creek's Sphere of Influence, including the 230 La Casa Via Site. The neighborhood is bounded by the city of Concord to the north and by unincorporated Contra Costa County and Mount Diablo State Park to the east. To the southwest, it is bounded by the Homestead/Cherry Lane neighborhood, a primarily single family neighborhood "characterized by older homes with significant setbacks, mature vegetation and streets designed to County standards."<sup>1</sup> To the south, the Ygnacio Valley neighborhood is bounded by the Los Lomas neighborhood, "characterized by a wide range of residential densities," including medium density single family and low and medium multifamily residential; this neighborhood also contains medical offices.<sup>2</sup> Also to the south and east is the Shell Ridge Open Space area in unincorporated Contra Costa County.

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<sup>1</sup>City of Walnut Creek 1989 General Plan, p. 2-16.

<sup>2</sup>General Plan, p. 2-14 - 2-15.



West of the Homestead/Cherry Lane and Los Lomas neighborhoods, Ygnacio Valley Road also connects the project subareas with the general-plan-designated "Core Area," which is the downtown commercial and mixed-use hub of Walnut Creek.<sup>1</sup>

**b. Vicinity Land Use Pattern**

The land use pattern in the project vicinity is illustrated on Figure 12.

The project site and immediate vicinity encompasses the southwestern portion of the Ygnacio Valley neighborhood district. This overall neighborhood is identified in the general plan as encompassing "a large segment of the City's suburban residential development" and characterized by "wide tree-lined streets [and] one and two story homes with well landscaped front yards" and "pockets of high density housing, primarily along Ygnacio Valley Road, Bancroft Road, and Treat Boulevard."<sup>2</sup>

The general plan identifies the major nonresidential uses in the Ygnacio Valley neighborhood as: (1) John Muir Medical Center; (2) three neighborhood shopping centers; (3) Shadelands, a business park located at 2660 Ygnacio Valley Road, approximately three miles northwest of the Main Campus Site; (4) Heather Farms, a 100-acre community park located at 301 North San Carlos Drive within one-half mile of the Main Campus Site; and (5) the Lime Ridge Open Space area, approximately six miles northeast of the Main Campus Site.<sup>3</sup>

Located adjacent to Ygnacio Valley Road in close proximity to the Main Campus Site, Heather Farms park is identified in the general plan *Parks and Recreation Subelement* as "the core of Walnut Creek's park and recreation system," with heavy usage by residents from throughout the city. It contains two lakes, an equestrian arena, a garden center, an Olympic-sized pool, ballfields, tennis courts, a community center, and passive landscaped areas.<sup>4</sup>

Also less than a half mile from the Main Campus Site, at the southeast corner of San Carlos Drive and Ygnacio Valley Road, the Ygnacio Plaza shopping center contains neighborhood retail uses anchored by a supermarket.

The project subareas are connected directly to Heather Farms park via the Briones/Mt. Diablo Trail, operated and maintained by the East Bay Regional Park District (EBPRD), and the Ygnacio Canal or "Canal Loop" trail, operated and maintained by the city. Both trails are designated for pedestrian and equestrian use. The Briones/Mt. Diablo trail follows the

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<sup>1</sup>General Plan, p. 2-15

<sup>2</sup>General Plan, p. 2-13.

<sup>3</sup>ibid.

<sup>4</sup>General Plan, p. 5-42.

perimeter of the 230 La Casa Via Site, bisects the La Casa Court Site, and connects to the Ygnacio Canal trail behind the Main Campus Site. The Ygnacio Canal trail links Heather Farms, San Miguel Neighborhood Park, Arbolado Neighborhood Park, and the EBRPD Contra Costa Canal Trail. Directly to the south of the 230 La Casa Via Site, the Briones/Mt. Diablo trail also connects to the Shell Ridge Open Space, which contains portions owned by the city, EBRPD, and the State of California. In the vicinity of Shell Ridge, the Briones/Mt. Diablo trail also links to a number of other EBRPD equestrian/pedestrian trails.

In the discussion of John Muir Medical Center within the context of the Ygnacio Valley neighborhood, the general plan states:

*The hospital has expressed interest in developing [the La Casa Court Site] as part of the hospital campus; however, a general plan amendment would be required to permit this type of development. A major concern with development in this area is intrusion into the existing rural residential neighborhood [the La Casa Via neighborhood] to the east of the John Muir property. The area presently consists of large residential lots nestled in a beautiful valley. Strong neighborhood opposition was voiced during the general plan hearings against non-residential development in the vicinity of this special neighborhood.<sup>1</sup>*

### **c. Surrounding Land Uses**

Figure 12 illustrates the existing land uses which surround the four project subareas. Table 7 lists the size, existing land use characteristics, and current general plan and zoning designations for 11 surrounding properties.

(1) Surrounding Land Uses North of La Casa Via. The area north of La Casa Via, which encompasses the Main Campus and La Casa Court Sites, includes the following surrounding land uses:

*(a) San Miguel Neighborhood.* This single family residential neighborhood (#14 on Figure 12) is located in the city of Walnut Creek to the north of the Main Campus and La Casa Court Sites. This neighborhood is relatively flat, is at a lower elevation than the project subareas, and is separated from the project subarea by the Ygnacio Canal. The portion of the San Miguel Neighborhood closest to the project subareas is zoned R-8 (single family, minimum 8,000-square-foot lot size). The neighborhood contains San Miguel Neighborhood Park (#15 on Figure 12), a four acre city-maintained park located directly to the northeast of the Main Campus Site which contains two tennis courts, picnicking facilities, and passive recreational amenities. The park is linked directly to the project subareas via the Briones-Mt. Diablo and Ygnacio Canal trails.

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<sup>1</sup>Ibid.

Table 7

CURRENT SIZE, LAND USE, GENERAL PLAN AND ZONING DESIGNATION OF MAJOR PARCELS IN VICINITY OF PROJECT

<u>Parcel</u>	<u>Site Size (acres)</u>	<u>Current Land Use</u>	<u>Current General Plan Designation</u>	<u>Current Zoning District</u>
Main Hospital Campus Site (1601 Ygnacio Valley Road)	17.98	Medical Center	Hospital (HO)	Planned Development District (PD-1647)
La Casa Court Site (185 La Casa Via and La Casa Court)	2.23	Single family dwelling occupied by Medical Offices (185 La Casa Via)	Office (OF) and Single-Family Low (SFL)	Limited Commercial District with Overlay Zone (CO-04)
	4.94	Undeveloped residential cul-de- sac (La Casa Court)	Single-Family Low (SFL) Residential designated land use 1-3 dwelling units per acre	Planned Development District (PD-1443)
230 La Casa Via Site	6.26	Undeveloped	Single-Family Very Low (SFVL) Approved land use for congregate care residential (P-1)	Planned Development District (Contra Costa County) (PD- 1330)
Schulze Property	2.66	Single family residence	Single Family Low (SFL) Residential designated land use 1-3 dwelling units per acre	Planned Development District (PD-1443)
Montego Site (1455 Montego Road)	1.22	Medical Offices	Office (OF)	Limited Commercial District (CO)
1515 Ygnacio Valley Road	1.47	Medical Offices	Office (OF)	Limited Commercial District (CO)
Walnut Creek Hospital	2.60	Psychiatric Hospital	Hospital (HO)	HO-PD
American Baptist Church	2.95	Church/institutional	Single Family Low (SFL)	Planned Development District (PD-1330)
Corvey Court Properties	2.99	Single family residences	Single Family Low (SFL)	Planned Development District (PD-1330)
Senior Housing	3.65	Senior Housing	Office (OF)	Limited Commercial District (CO)
La Casa Via Medical Office Properties	12.29	Medical offices and skilled nursing facility	Office (OF)	Limited Commercial District (CO)

SOURCE: Thistlethwaite Architectural Group; Gagen, McCoy, McMahon & Armstrong; April 1995.





1. Main Campus Site
2. La Casa Court Site
3. 230 La Casa Via Site
4. Schulze Property
5. La Casa Via Medical Office Properties
6. 1515 Ygnacio Valley Road Medical Office Building
7. Walnut Creek Hospital
8. Senior Housing
9. American Baptist Church
10. Corvey Court Residential Properties
11. 240 La Casa Via Medical Office Building
12. Shell Ridge Open Space
13. La Casa Via Neighborhood
14. San Miguel Neighborhood
15. San Miguel Neighborhood Park
16. Diablo Hills Neighborhood and Private Golf Course
17. Tampico/Montego Neighborhood
18. Ygnacio Plaza Shopping Center
19. Heather Farms Park

SOURCE: Wagstaff and Associates. Base from WAC Corporation

Figure 12  
**PROJECT VICINITY,  
EXISTING LAND USE**





(b) *1515 Ygnacio Valley Road*. This low-rise medical office building with surface parking (#6 on Figure 12) is located in the city of Walnut Creek at the northeast corner of the Ygnacio Valley Road and La Casa Via intersection. It is surrounded on two sides by the Main Campus Site. As shown on Figure 4 in section III, implementation of Master Plan buildout (the "Master Plan Acquisition Option") would require purchase of this property by JMMC, demolition of the existing structure on the site, construction of the proposed Medical Center Way through the site to Ygnacio Valley Road, and landscaping of the remainder of the site. This 1.47-acre site is currently zoned *Limited Commercial (C-O)*.

(c) *Walnut Creek Hospital*. This two-story psychiatric hospital (#7 on Figure 12) is located within the city limits at 175 La Casa Via, between the Main Campus and La Casa Court sites. The facility contains 108 inpatient beds, plus outpatient facilities, and an active full-time medical staff of 25 physicians. The facility contains surface parking and is arranged around an internal courtyard. As shown on Figure 4, implementation of the "Master Plan Acquisition Option" would require purchase of a portion of this property by JMMC and demolition of at least a portion of the existing facility in order to extend Medical Center Way between the Main Campus and La Casa Court sites.

(d) *Ygnacio Canal*. As shown on Figure 12, the Ygnacio Canal separates the Main Campus Site, La Casa Court Site, and the Schulze Property from the San Miguel neighborhood. It is a narrow, open, concrete-lined canal owned by the United States Bureau of Reclamation and administered by the Contra Costa County Water District. The water in the canal originates in the Delta and is utilized primarily for irrigation purposes, although it also supplies domestic water for the city of Martinez.

(e) *Briones-Mt. Diablo Trail*. This pedestrian/equestrian trail, which is illustrated on Figure 35 in section IV.E.5 of this EIR (Public Services, Parks and Recreation), follows the edge of the Ygnacio Canal near the northeast boundary of the Main Campus Site, connects with La Casa Via through a portion of the La Casa Court Site, crosses La Casa Via, follows Corvey Court along the northeastern boundary of the 230 La Casa Via Site, and continues in a southeasterly direction behind the La Casa Court Site. The trail is operated and maintained by the East Bay Regional Park District.

(f) *Ygnacio Canal/Canal Loop Trail*. This trail, which is also illustrated on Figure 35, shares the Briones-Mt. Diablo Trail right-of-way north of its intersection with that trail. East of the Briones-Mt. Diablo Trail intersection, the Ygnacio Canal/Canal Loop trail continues to follow the Ygnacio Canal. The trail is operated and maintained by the city of Walnut Creek Public Services Department.

(2) Surrounding Land Uses South of La Casa Via. The area south of La Casa Via, which encompasses the 230 La Casa Via Site, includes the following surrounding land uses:

(a) *La Casa Via ("Shell Ridge") Medical Office Properties*. Located in the city of Walnut Creek on the southwest side of La Casa Via road across from the Main Campus Site, this

complex consists of independently owned and managed low-rise medical office buildings (#5 on Figure 12).

(b) *Montego Road/Tampico Road Neighborhood*. This multifamily neighborhood (#17 on Figure 12) is located in the city of Walnut Creek directly to the south and southwest of the 230 La Casa Via site. The neighborhood consists of single- and multi-family residential units on curvilinear streets.

(c) *Montego Road Senior Housing*. This multifamily senior housing complex (#8 on Figure 12) is located within the city limits at the intersection of Montego Road and La Casa Via, across La Casa Via from Walnut Creek Hospital and the Main Campus Site.

(d) *Corvey Court Properties*. This area of four single family homes (#10 on Figure 12) within the city is accessed from La Casa Via and Corvey Court, a narrow street which follows the northwestern boundary of the 230 La Casa Via Site.

(e) *240 La Casa Via*. This medical office building (#11 on Figure 12) is located in unincorporated Contra Costa County between the 230 La Casa Via site and the La Casa Via neighborhood. It is the closest existing medical use to the La Casa Via neighborhood.

(f) *American Baptist Church*. This religious facility (#9 on Figure 12) is located in the city at 200 La Casa Via, across La Casa Via from the La Casa Court Site and across Corvey Court from the 230 La Casa Via Site.

(3) Surrounding Land Uses on La Casa Via to the East of the 230 La Casa Via and La Casa Court Subareas. The La Casa Via neighborhood (#13 on Figure 12) is a single family residential neighborhood located on either side of La Casa Via in the hills to the east of the La Casa Court and 230 La Casa Via subareas. The portion of the La Casa Via neighborhood adjacent to the La Casa Court Site is a relatively recent subdivision (the "Country" Subdivision) within the city with a P-D zoning designation. The remainder of the La Casa Via neighborhood is in unincorporated Contra Costa County and contains large lots in a semi-rural setting zoned for very low density single-family residential use.

(4) Surrounding Land Uses West of Ygnacio Valley Road. The area west of Ygnacio Valley Road includes the following land uses:

(a) *Saint John Vianney Church*. This is a religious facility located at 1650 Ygnacio Valley Road, directly opposite the Main Campus Site.

(b) *Diablo Hills Neighborhood*. This golf course-oriented residential community (#16 on Figure 12) is located in the city of Walnut Creek to the north and west of Ygnacio Valley Road, opposite Ygnacio Valley Road from the Main Campus Site. It contains the private Diablo Hills Golf Club.



**d. Existing Project Site Land Uses**

The project subareas include the existing 365,000-square-foot JMMC facility on the Main Campus Site and the 2,000 square-foot residence converted to medical office use on the La Casa Court Site. With the exception of the developed cul-de-sac at the La Casa Court Site and the single family home on the Schulze property, the remaining land within the project subareas is currently vacant.

A detailed description of the existing land use characteristics of the project subareas, including the existing medical center uses at the Main Campus Site, is provided in section III.C. (Project Description) of this EIR, and is illustrated in Figure 2 of that section.

**e. Offsite JMMC Land Uses**

In addition to the Main Campus, La Casa Court, and 230 La Casa Via Sites, JMMC also owns a 1.2-acre property at 1455 Montego Road, south of the Main Campus site near the Montego multifamily residential neighborhood. JMMC's Montego property contains 22,360 square feet of medical offices. The physicians and associated personnel at the Montego property are not employed directly by JMMC. This property is currently designated as *Office* (OF) in the general plan and is zoned *Limited Commercial District* (C-O). No change to the general plan, zoning designation, or to the existing land use, is proposed for this property.

**f. Cumulative Land Development in the Project Vicinity**

At this writing, no significant development projects were currently under review in the project vicinity, either in the city or on unincorporated land. However, the Contra Costa Water District (CCWD) has expressed interest in constructing a four million gallon reservoir on the 230 La Casa Via Site. Such a facility would have an outside diameter of 150 to 175 feet, and could possibly be placed underground. At this writing, CCWD is working with JMMC to determine if it is feasible to accommodate both a reservoir and the JMMC Master Plan uses at the site; if this is not feasible, it is possible that JMMC could agree to sell the 230 La Casa Via Site to CCWD for their exclusive use, which may preclude future development of the site for medical center use. Even if JMMC does not agree to sell the property, CCWD could use its eminent domain authority to obtain the parcel.

Because CCWD's interest in the 230 La Casa Via Site is preliminary at this time, and CCWD is also reviewing other potential sites for the same purpose, the land use impacts of a reservoir at the 230 La Casa Via Site are not analyzed in this EIR. However, environmental analysis (including land use impacts) will be necessary if and when a reservoir is formally proposed at this location. A further discussion of this issue is contained in section IV.E.3 (Public Services, Water) of this EIR.

## **2. IMPACTS**

### **a. Significance Criteria**

Based on Appendix G of the CEQA Guidelines, the project would be considered to have a significant land use impact if it would:

1. Conflict with the adopted environmental plans and goals of the community where it is located;
2. Have a substantial, demonstrable negative aesthetic effect;
3. Disrupt or divide the physical arrangement of an established community;
4. Create a potential public health hazard or involve a use, production, or disposal of materials which poses a hazard to people or animal or plant populations in the area affected; or
5. Conflict with established recreational, educational, religious or scientific uses of the area.

These criteria are applied in this EIR section to evaluate the significance of identified project land use impacts.

### **b. Impacts on the Citywide Land Use Context**

The project would not be expected to significantly affect the city's neighborhood district characteristics and distinctions. The primary medical center use of the JMMC is not proposed to be changed and the project is not located at the boundary between two neighborhood districts. It would therefore not be expected to affect neighborhood district transitions or overall neighborhood district interrelationships.

### **c. Impacts on the Vicinity Land Use Pattern**

Buildout of the proposed Master Plan would have no significant adverse impacts on the general land use pattern of the Ygnacio Valley Road/La Casa Via vicinity or the western Ygnacio Valley. The existing medical center is already one of the major nonresidential uses in the Ygnacio Valley neighborhood district. Implementation of the proposed Master Plan would intensify, but not significantly alter, this existing land use pattern.

The project would not significantly change the existing relationship between the medical center and the other major land uses in the western Ygnacio Valley. The relationship between the existing medical center and other commercial uses on Ygnacio Valley Road would remain essentially unchanged. Trail connections would be maintained between the project subareas, Heather Farms park to the northwest, and Shell Ridge Open Space to the southeast.

#### d. Impacts on Surrounding Land Uses

As noted in section IV.1.b above, the city's general plan specifically identifies JMMC as a land use which, if expanded onto the La Casa Court Site, could be intrusive to the La Casa Via residential neighborhood to the east. Neighboring medical uses could also be adversely affected by the project.

(1) Residential Compatibility Impacts. Each of the project subareas borders on an existing residential neighborhood. The potential for a significant adverse impact on these surrounding residential uses varies with each subarea.

*(a) Impacts on Residential Uses Surrounding the Main Campus Site.* The Main Campus Site borders the San Miguel neighborhood to the northeast (#14 on Figure 12) and the Diablo Hills neighborhood to the northwest (#16 on Figure 12). A significant downward slope, the Ygnacio Canal, and San Miguel Neighborhood Park buffer the San Miguel neighborhood from the Main Campus Site. Ygnacio Valley Road and the Saint John Vianney Church buffer the Main Campus Site from the Diablo Hills neighborhood. The project would allow a substantial expansion of the existing medical uses at the Main Campus Site. To minimize the effect of these medical uses on the San Miguel neighborhood, the project includes a buffer (B-6 on Figure 6) at the north side of the Main Campus Site which would incorporate landscaping, a 50-foot building setback, and a stepped-down building envelope. Although this would be sufficient land use buffer for most of the medical and ancillary uses permitted by the Master Plan (see Table 6), possible construction of an above-grade parking garage at the northeastern or northwestern edge of the Main Campus Site, immediately adjacent to the San Miguel neighborhood, could result in a combination of noise, odor, and visual impacts which, when considered cumulatively, would represent a *potentially significant adverse land use impact* of the project<sup>1</sup> (**LU Impact 1**). (See criterion 1 in section 2.a above.)

*(b) Impacts on Residential Uses Surrounding the La Casa Court Site.* The La Casa Court Site borders the La Casa Via neighborhood and, to a lesser degree, the San Miguel neighborhood. San Miguel Neighborhood Park, the Ygnacio Canal, and a change in elevation buffer the La Casa Court Site from the nearest residential uses in the San Miguel neighborhood. The park, canal, and existing topography would remain unchanged and would be expected to reduce the land use compatibility impacts of development allowed by the Master Plan to below the level of significance.

Other than a rise in elevation at the northeastern corner of the site, no buffer exists between the La Casa Court Site and the La Casa Via neighborhood (#13 on Figure 12). If it were built, the residential subdivision which has been approved for the eastern half of the La Casa Court

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<sup>1</sup>On the Main Campus Site, the proposed master Plan would allow above-grade parking structures to be constructed anywhere within the permitted building volume envelope. Figure 10 illustrates one possible scenario with a three-story parking structure directly adjacent to the San Miguel neighborhood.



Site would serve as a low-density single family residential buffer between the medical uses to the west and the low density La Casa Via residential neighborhood to the east. Although the proposed Master Plan would eliminate this residential buffer, the Master Plan includes three main land use principles for the La Casa Court Site which would serve to buffer future medical uses in this subarea from the La Casa Via residential neighborhood:

- Lower Intensity Uses/Density. The lower intensity development standards proposed in the Master Plan for this subarea, which are more fully described in sections III (Project Description) and IV.B (Visual and Urban Design Factors) of this report, would serve to soften the transition from medical to single family residential uses. Certain higher-intensity uses (such as a heliport) would not be permitted at the La Casa Court Site.
- Minimum Setbacks. At the boundary to the La Casa Via neighborhood, the Master Plan would require an average building setback of 45 feet and a minimum setback of 30 feet.<sup>1</sup>
- Landscaped Buffer with Trail. The required setback area at the La Casa Via neighborhood boundary would contain the re-aligned Briones/Mt. Diablo Trail and would be landscaped with trees to "serve the purposes of screening buildings on the La Casa Court Site from residences to the east."<sup>2</sup>

With implementation of the above measures, the project-permitted land uses at the La Casa Court Site would not represent a significant adverse land use compatibility impact on the La Casa Via residential neighborhood.

*(c) Impacts on Residential Uses Surrounding the 230 La Casa Via Site.* The 230 La Casa Via Site, which borders the La Casa Via neighborhood and the Corvey Court residential area, would be subject to the same development intensity limitations as the La Casa Court Site. Compared to the La Casa Court site, the relationship of this site to the La Casa Via neighborhood is less direct. The 240 La Casa Via medical office building (#11 on Figure 12) is located between a large portion of the 230 La Casa Via Site and the La Casa Via neighborhood. The Master Plan indicates that the portion of the 230 La Casa Via Site which directly abuts the La Casa Via neighborhood would include the same trail/landscape buffer and setback provisions noted for the La Casa Court Site in IV.2.b(1)(c) above. With the combination of these existing factors and Master Plan provisions--the existing buffer provided by the 240 La Casa Via property, and the lower-intensity land use limitations--the project-permitted land uses at the 230 La Casa Via site would not be expected to create a significant adverse land use compatibility impact on the La Casa Via neighborhood.

At the rear property line, the 230 La Casa Via Site abuts the Shell Ridge Open Space area (#12 on Figure 12) and beyond the open space area, the Montego Road/Tampico Road

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<sup>1</sup>JMMC Campus Master Plan Application, *Supplement One*, p. 43.

<sup>2</sup>JMMC Campus Master Plan Application, *Supplement One*, p. 45.

neighborhood (#17 on Figure 12). The rise in elevation at the rear of the property and the Shell Ridge Open Space area serve to buffer the site from the Montego Road/Tampico Road neighborhood. In addition, the impact of the medical/residential transition would be also be reduced by Master Plan-designated lower intensity land use limitations identical to that required for the La Casa Court Site, and the minimum required building setback of 50 feet at this location. This setback area would also be required to be landscaped with trees and other vegetation to "provide a visual barrier between the Medical Center uses and the residential area."<sup>1</sup> With implementation of these Master Plan provisions, in combination with the existing buffer provided by the Shell Ridge Open Space, the project-permitted land uses at the 230 La Casa Via Site would not be expected to represent a significant adverse land use compatibility impact on the Montego/Tampico neighborhood.

The Corvey Court residential area consists of four single family homes on large lots to the west of the 230 La Casa Via Site (#10 on Figure 12). Other than the Corvey Court cul-de-sac, which is the sole access route to the Corvey Court residential area, there are no existing buffers separating the Corvey Court residential area from the edge of the 230 La Casa Via Site. The Master Plan would require a minimum 25'-wide setback at this property line, with provisions requiring that the setback area be landscaped to screen project buildings. In addition, no service or primary access ways would be permitted between the project and the Corvey Court Cul-de-sac. With these provisions, in combination with the lower-intensity land use limitations associated with this subarea, buildout of the project-permitted land uses at the 230 La Casa Via Site would not be expected to represent a significant adverse land use compatibility impact on the Corvey Court residential area.

(2) Medical Use Compatibility Impacts. Full implementation of the proposed Master Plan Acquisition Option (Figure 4) would require the demolition of the existing 1515 Ygnacio Valley Road medical office building and partial or total demolition of the Walnut Creek Hospital. In addition, even under the Nonacquisition Option (e.g., less than 250,000 square feet of development at the Main Campus Site), any development of the La Casa Court or 230 La Casa Via properties would trigger a requirement that the rear of the Walnut Creek Hospital property be redeveloped as a service road through an easement agreement with JMMC (see Figures 6 and 9 in section III).

*(a) 1515 Ygnacio Valley Road Demolition.* Demolition of the 1515 Ygnacio Valley Road office building facility (see photo on page 117) to accommodate the proposed Medical Center Way connection to Ygnacio Valley Road would not represent a significant adverse impact because the associated loss of medical office space could be offset by the creation of new medical office space at JMMC, and/or by other existing medical office buildings with vacancy in the city (see Appendix B). By facilitating this diversion of JMMC traffic away from La Casa Via, provision of a more unified circulation system, creation of new open space features along Ygnacio Valley Road, and the proposed extension of Medical Center Way, the proposed

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<sup>1</sup>JMMC Campus Master Plan Application, *Supplement One*, p. 45.



demolition of 1515 Ygnacio Valley Road would represent a potentially beneficial land use impact of the project.

(b) *Service Road Impacts on Walnut Creek Hospital.* Walnut Creek Hospital is a general-plan-identified *Community Facility*, providing mental health care services for adults, adolescents and children (see photo on page 117). Operated by Community Psychiatric Centers, who administer a group of psychiatric hospitals throughout California and the nation, Walnut Creek Hospital offers both in-patient and out-patient mental care, including programs to treat depression, chemical dependency, chronic mental illness, stress and anxiety, and eating disorders. The hospital also conducts therapy groups covering a wide range of mental health issues, including assertiveness training, stress management, and music/art therapy.

Under the Master Plan Nonacquisition Option, (Figure 5), when the La Casa Court Site is developed, JMMC would be required to provide a service road between the eastern terminus of Medical Center Way and the La Casa Court Site through the existing on-site parking area at the rear of Walnut Creek Hospital (see Figures 6 and 7). In addition, development of the 230 La Casa Via Site would require that service vehicles travel (1) through the Main Campus Site, (2) through the rear of Walnut Creek Hospital, (3) through the La Casa Court Site, and (4) across La Casa Via to the 230 La Casa Via Site.

The Master Plan required service access way at the rear of the Walnut Creek Hospital would require, at a minimum, an easement agreement with Walnut Creek Hospital. Parking eliminated by the access easement would be replaced in-kind on the Main Campus Site immediately adjacent to the Walnut Creek Hospital site. No development standards or design guidelines have been proposed for this introduced service road. The affected area at the rear of the Walnut Creek Hospital property is relatively narrow and, if developed as a service road for the La Casa Court and 230 La Casa Via Sites, would: (1) experience a significant amount of service vehicle traffic (i.e., all service vehicle traffic for up to 300,000 square feet of medical center floor area) in close proximity to existing psychiatric hospital uses, and (2) would allow for almost no setbacks between the hospital and the semi-public service road right-of-way. These adverse compatibility effects on Walnut Creek Hospital would represent a *potentially significant adverse land use impact (LU Impact 2)* of the project. (See criterion 1 in section 2.a above.)

(c) *Medical Center Way Impacts on Walnut Creek Hospital.* Under the Acquisition Option, Medical Center Way would eventually extend through the Walnut Creek Hospital property to the La Casa Court Site. As illustrated in Figure 4, such an extension would require at least a partial demolition of Walnut Creek Hospital, with possible reconstruction of the demolished portion on the La Casa Court Site. If partially demolished and reconstructed, the rear portion of Walnut Creek Hospital would abut the new Medical Center Way with little or no setback. The Master Plan contains no development standards or design guidelines for this scenario. A partial demolition could presumably require the temporary relocation of the facility and, over the long term, would significantly reduce the amount of privacy available to Walnut Creek





**1515 Ygnacio Valley Road** as seen from the Main Campus Site. Under the "Acquisition Option", this medical office building would be purchased by JMMC and demolished to make way for the proposed extension of Medical Center Way to Ygnacio Valley Road.



**Walnut Creek Hospital** looking south from the Main Campus Site. The La Casa Court Site, the La Casa Via neighborhood and Shell Ridge are visible in the background. If development occurs on either the La Casa Court or 230 La Casa Via Site, the Master Plan requires that service access be provided around the side and rear of Walnut Creek Hospital (i.e., through the parking area visible in this photograph). Full buildout of the Master Plan under the "Acquisition Option" would require purchase by JMMC and partial demolition of Walnut Creek Hospital in order to extend the proposed Medical Center Way to the La Casa Court Site.

Hospital patients. These possible effects on Walnut Creek Hospital represent a *potentially significant adverse impact (LU Impact 3)* of the project. (See criterion 1 in section 2.a above.)

(d) *Walnut Creek Hospital Relocation.* Under the Acquisition Option, it is also possible that Walnut Creek Hospital could be totally demolished and replaced either onsite, at one of the project subareas, or at some other off-site location. The Master Plan does not contain guidelines for the use or development of the Walnut Creek Hospital property in this eventuality, nor does it contain protocol for the relocation of Walnut Creek Hospital. Although any acquisition of all or a portion of Walnut Creek Hospital could only be achieved through the voluntary cooperation of the Walnut Creek Hospital ownership, if the facility is relocated to accommodate the project, the city (and potentially the county) could lose an important community mental health facility. Among the city's adopted general plan policies for *Community Facilities*, none prohibits or discourages the relocation or elimination of such facilities.

Presumably, the hospital operator, as part of an elective action to relocate, would seek a new site in the same Walnut Creek/Central Contra Costa County subregion. A land use of this nature can be expected to experience difficulty in finding a similar hospital site within any established Central County community, and would bring with it its own environmental impacts. Such an action, although initiated by the John Muir Master Plan, would represent a separate, private action or "project," subject to its own development and environmental review requirements.

(3) Project Demolition and Construction Period Land Use Compatibility Impacts. The Master Plan proposes to provide for expansion of the existing medical center on the Main Campus Site without demolition of the existing facilities. The only JMMC-owned building likely to be demolished as a result of the Master Plan is the 2,000 square-foot residential structure converted to medical office use on the La Casa Court Site (185 La Casa Via). However, under the Acquisition Option, the 1515 Ygnacio Valley Road property and all or a portion of the Walnut Creek Hospital property would be purchased by JMMC and the existing medical office and at least a portion of the existing Walnut Creek Hospital structure would be demolished for the purpose of extending the proposed Medical Center Way. If unmitigated, demolition/construction noise and dust impacts would be temporary, but *significant*, for both onsite and surrounding land uses, particularly the existing John Muir Medical Center, Walnut Creek Hospital, the Corvey Court neighborhood, and homes abutting these project subareas in the San Miguel and La Casa Via neighborhoods. *(LU Impact 4)* (See criterion 1 in section 2.a above.)

#### d. Impacts on Onsite Land Uses

Depending on the project subarea, the proposed Master Plan would result in either an intensification of or change in existing onsite land uses.



The visual implications and urban design relationships of the Master Plan proposed building envelopes for each subarea are addressed in more detail in section IV.B of this EIR, Visual and Urban Design Factors. The relationship of these development intensity limitations to related city general plan provisions (land use intensity, building heights, etc.) is discussed in section V, Project Relationships to Adopted Plans and Policies.

(1) Impacts on the Main Campus Site. The proposed Master Plan would result in the following land use changes on the Main Campus Site:

*Development Intensity.* The proposed Master Plan would allow intensification of the existing medical center on the 18-acre Main Campus Site. As described in section III, the Master Plan would allow *lot coverage* on the Main Campus Site to increase from the existing 14 percent to 50 percent, and total *floor area* to increase from 365,000 square feet (a floor area ratio of 0.47) to 900,000 square feet (an F.A.R. of 1.15).

The maximum *building heights* permitted on the Main Campus Site would increase toward the center and northeastern corner of the property, with a low of two-stories/25 feet along La Casa Via and a high of six stories/89 feet toward the center of the property.

These various increases in development intensity would not represent a significant adverse *land use* impact in comparison to the existing development intensity at the Main Campus Site. The visual and urban design impacts of these Master Plan aspects are discussed in section IV.B of this EIR.

*Land Use Breakdown.* Of the total square footage allowed by the Master Plan (including the existing medical center), a maximum of 74 percent of the floor area (approximately 888,000 square feet) could be developed as "hospital/medical center" uses, a maximum of 20 percent (approximately 240,000 square feet) could be developed as "continuing care" uses, and a maximum of six percent (approximately 72,000 square feet) could be developed as "medical office" uses. Aside from this overall limitation and a requirement that certain higher-intensity uses would not be permitted at the La Casa Court and 230 La Casa Via sites, the Master Plan does not establish guidelines or limitations regarding the arrangement of medical uses within the maximum allowable building envelope. Within the Master Plan parameters on allowable medical and ancillary uses listed in Table 6, the placement and type of new uses, and the relationship of these new uses to the existing medical campus layout, would be determined as JMMC builds out the Master Plan. Although it is assumed that additional medical uses selected by JMMC for the Main Campus Site would be implemented by the JMMC in a manner which minimizes related adverse land use compatibility impacts on existing JMMC operations, it is possible that the new land uses could cause noise impacts on existing facilities. These potential effects and associated mitigation recommendations are discussed in section IV.F, Noise, of this EIR.

The Master Plan includes a new circulation system for the Main Campus Site, described more fully in section 4.3, Transportation and Parking, which, under the Acquisition Option, would



eliminate the La Casa Via/Ygnacio Valley Road intersection, resulting in a more complex route pattern required to reach the Shell Ridge medical office properties from Ygnacio Valley Road. Although this roadway modification would essentially "isolate" the Shell Ridge medical office buildings located on La Casa Via, this effect would be partially offset by the circulation and organizational improvements proposed by the Master Plan, including the new primary axis roadway (Medical Center Way) through the medical center, the new secondary axis roadway (the "North-South Road") linking Medical Center Way with both Ygnacio Valley Road and La Casa Via, and the new pedestrian axis between the Shell Ridge medical office properties and the medical center.

(2) Impacts on the La Casa Court Site and Schulze Property. The La Casa Court Site is primarily vacant, with existing development limited to a 2,000-square-foot residence converted to medical office building use and a cul-de-sac road. As noted in section III, Project Description, the proposed Master Plan would provide for demolition of the existing medical office and cul-de-sac and construction of "lower-intensity medical uses" with a maximum lot coverage of 30 percent, a maximum floor area of 150,000 square feet (i.e., an F.A.R. of 0.48), and a maximum height of two stories/25 feet. Because the site is primarily vacant, these use changes would not represent a significant adverse *land use* impact on existing La Casa Court Site uses.

Consistent with the open space easement that limits development opportunities on the Schulze property, the proposed Master Plan would include P-D standards requiring the existing single-family use to remain at this location. Therefore, the project would not affect this land use.

(3) Impacts on the 230 La Casa Via Site. The 230 La Casa Via Site is entirely vacant. As noted in section III, Project Description, the proposed Master Plan would allow construction on this subarea of "lower-intensity medical uses" with a maximum lot coverage of 30 percent, a maximum floor area of 150,000 square feet (an F.A.R. of 0.55), and a maximum height of two stories/29 feet. Because the site is currently vacant, these use changes would not represent a significant adverse impact on existing 230 La Casa Via Site uses.

(4) Onsite Construction/Demolition Impacts. The demolition/construction impacts noted for surrounding land uses in section IV.2.c(4) above could also affect the existing medical uses on the Main Campus Site. The effect would represent a temporary, but *significant*, adverse land use compatibility impact, especially on the inpatient function of the existing medical center. **(LU Impact 5)** (See criterion 1 in section 2.a above.)

#### d. Impacts on Offsite JMMC Land Uses

The project would not significantly affect the offsite JMMC-owned Montego Road medical office building or the other offsite JMMC-owned uses.

### 3. MITIGATIONS

#### a. Impacts on the Citywide Land Use

No significant land use impacts have been identified; no mitigation measures are required.

#### b. Impacts on the Vicinity Land Use Pattern

No significant land use impacts have been identified; no mitigation measures are required.

#### c. Impacts on Surrounding Land Uses

(1) Residential Compatibility Impacts. *(LU Impact 1)* Implementation of the following mitigation measure will reduce identified project land use impacts on the San Miguel neighborhood to a less than significant level:

- Above-grade parking structures shall not be constructed within a minimum 200-foot setback, to be measured from the northwestern/northeastern property line of the Main Campus Site (i.e., as measured from the property line adjacent to the San Miguel neighborhood).

(2) Medical Use Compatibility Impacts. Implementation of the following mitigation measures will reduce project land use impacts on Walnut Creek Hospital to less than significant levels:

(a) *Service Road Impacts.* *(LU Impact 2)* If the La Casa Court Site is developed *without* the full extension of Medical Center Way, the required service road at the rear of Walnut Creek Hospital should be constructed only after detailed design and development guidelines have been prepared, and have been reviewed and approved by the city, for this access way. These design guidelines shall include measures to adequately buffer the required service road from the existing hospital, plus other measures to ensure that patient privacy is maintained.

(b) *Medical Center Way Impacts.* *(LU Impact 3)* If the Acquisition option, with full extension of Medical Center Way, is to be implemented, the applicant shall, prior to demolition of any portions of Walnut Creek Hospital, and in cooperation with Walnut Creek Hospital ownership, prepare a *construction period patient protection plan* for city review concurrent with the use permit process. In addition, to maintain patient privacy at Walnut Creek Hospital, the applicant shall prepare detailed design guidelines for the portion of the remaining hospital which would face the new Medical Center Way. These guidelines shall include provisions for the adequate buffering of Walnut Creek Hospital operations from Medical Center Way.

(3) Project Demolition and Construction Period Land Use Compatibility Impacts. *(LU Impact 4)* To reduce project demolition/construction-period impacts on adjacent residential and medical uses to a less-than-significant level, incorporate in the Master Plan conditions of approval construction contact requirements regarding the implementation of conventional

construction/demolition noise and dust abatement measures. Sections IV.F.3 and IV.J.3 of this EIR (Noise and Air Quality impact mitigation sections) include a list of such measures.

**c. Impacts on Onsite Land Uses**

(1) Impacts on the Main Campus Site. No significant impacts have been identified; no mitigation measures are required.

(2) Impacts on the La Casa Court Site and Schulze Property. No significant impacts have been identified; no mitigation measures are required.

(3) Impacts on the 230 La Casa Via Site. No significant impacts have been identified; no mitigation measures are required.

(4) Onsite Demolition/Construction Impacts. *(LU Impact 5)* Implement the same demolition/construction mitigations recommended for surrounding land uses in section IV.3.c(3) above to mitigate on-site demolition/construction impacts.

**d. Impacts on Offsite JMMC Land Uses**

No impacts have been identified; no mitigation measures are necessary.



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## B. VISUAL AND URBAN DESIGN FACTORS

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This EIR chapter describes the visual characteristics of the project subareas and vicinity, important surrounding views to and through the project subareas, and the impacts of the proposed Master Plan on these visual factors. The chapter also describes the relationship of the project to pertinent city visual and urban design policies, and recommends mitigations to minimize project visual and urban design impacts. The chapter has been prepared with the assistance of Gordon Chong + Associates, architects and urban design consultants to the EIR authors.

### 1. SETTING

#### a. Visual Character of Project Vicinity

(1) Ygnacio Valley Road Corridor. As noted in the previous section (IV.A.1.a--Existing Land Use Setting), the project vicinity, generally defined as the southwestern Ygnacio Valley neighborhood district, is primarily characterized by a suburban scale and development pattern. Amidst gently rolling hills, the built environment in this area consists of: (1) Ygnacio Valley Road, a major arterial road with a partially landscaped center median and perimeter; (2) two-story multifamily residential buildings in neighborhoods which abut Ygnacio Valley Road; (3) one-to-two-story single-family residential neighborhoods located off Ygnacio Valley Road on curvilinear streets with sidewalks; (4) single-story neighborhood shopping centers setback from Ygnacio Valley Road behind landscaped surface parking areas; (5) one-to-two-story medical office buildings near Ygnacio Valley Road; and (6) the existing seven-story, 365,000 square foot John Muir Medical Center, by far the most prominent built form in the Ygnacio Valley neighborhood district.

(2) La Casa Via Neighborhood. The area to the east of the project subareas, the La Casa Via neighborhood, has a distinctly more rural visual quality than other parts of the Ygnacio Valley neighborhood district. The *Pedestrian Facilities Element* of the city's general plan identifies the La Casa Via neighborhood as a "rural character neighborhood," a residential type "characterized by lots no smaller than 10,000 square feet with many lots 15,000 to 20,000 square feet in area. Streets are often narrow, since they are older neighborhoods which were developed under County standards.... Significant mature vegetation creates the rural feeling in most of these areas.... and public sentiment favors maintaining the existing

*character.*"<sup>1</sup> Like other rural character neighborhoods in the city, most of the streets in the La Casa Via neighborhood do not contain sidewalks.

Notable vegetation in the La Casa Via neighborhood includes some large native oak trees on the 230 La Casa Via Site and, in the distance, views of native oaks on Shell Ridge, Lime Ridge, and Mt. Diablo.

(3) Special Visual Features. The surrounding landscape visible from the project area contains a number of prominent open space units. Views of Mt. Diablo State Park, Shell Ridge Open Space, Lime Ridge Open Space, and Heather Farms park are possible at various points along Ygnacio Valley Road, a general-plan-designated "*auto-oriented scenic corridor*." Three knolls in the project vicinity were protected as private open space through city adoption of Specific Plan 1 and Specific Plan 3 in the 1970s, although development constructed since that time has obscured views of these natural features from Ygnacio Valley Road and, to a lesser extent, from La Casa Via. The largest private open space area in the vicinity, Diablo Hills Golf Course, is not readily visible from Ygnacio Valley Road.

#### **b. "Gateway" Routes and Land Use Boundaries**

The Walnut Creek General Plan identifies a number of key community entrance points or "gateways" warranting special consideration and treatment. The general-plan-designated community "gateways" nearest the project site are located at (1) the Ygnacio Valley Road/California Boulevard intersection in downtown Walnut Creek, approximately three miles southwest of the Main Campus Site; and (2) the Ygnacio Valley Road/Oak Grove Road intersection, approximately three-and-one-half miles northeast of the Main Campus Site.

No purposeful gateway urban design objectives have been established for locations in the immediate project vicinity. However, three key visual transition areas are apparent in the area, as follows:

- *Ygnacio Valley Road/La Casa Via Intersection*. (See photo 2.) This intersection is the primary existing vehicular and pedestrian entry point from Ygnacio Valley Road into the JMMC Main Campus and La Casa Via medical office area. Urban design treatment at this intersection consists of typical suburban infrastructure (sidewalks, "cobra"-style lighting fixtures in a brick-paved center median, traffic signals, street signage, etc.). Roadside landscaping consists primarily of plants on private property adjacent to the public right-of-way (shrubbery and trees). Existing two-story buildings on both sides of La Casa Via near the intersection have relatively shallow setbacks which tightly constrain views of the existing medical center and Mount Diablo from Ygnacio Valley Road, although portions of Mount Diablo and the surrounding foothills are still visible from some vantage points along Ygnacio Valley Road.

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<sup>1</sup>1989 General Plan, 4-47.

Prominent views of the medical center and Mount Diablo from the Ygnacio Valley Road/La Casa Via intersections are accessible only after turning east onto La Casa Via (see photo 2 and Figure 17). An additional visual constraint at this intersection is the presence of major, above-ground electrical transmission lines which cross the intersection and are supported by a large transmission line tower just north of the intersection to the west of the Main Campus Site.

- *Ygnacio Valley Road Driveway to JMMC.* (See photo 4.) The existing medical center's presence on Ygnacio Valley Road is most strongly felt at the northwest corner of the Main Campus Site, where a signalized driveway leads directly from Ygnacio Valley Road into the medical center (the "north driveway"). This access point is landscaped with trees and manicured lawns, and provides a view from Ygnacio Valley Road of the side and rear of the medical center.
- *La Casa Via Neighborhood Transition.* The existing visual transition eastward along La Casa Via from the mixed use medical/institutional/multi-family residential area of La Casa Via to the La Casa Via rural residential neighborhood is demarked by: (1) dramatic views of Mount Diablo and the surrounding foothills over the surface parking lot at the front of the Main Campus Site, and over the vacant portions of the La Casa Court and 230 La Casa Via sites; (2) changing street characteristics from city collector standards with striped travel lanes, curbs and sidewalks, curbside parking, street trees, and streetlights, to a narrower width, unstriped, rural residential road without curbs, sidewalks, or street lights and with thickly-planted, informal tree plantings along the street perimeter; (3) a rise in elevation from the relatively flat, suburban landscape near Ygnacio to steeper topographical features on both sides of La Casa Via east of La Casa Court; (4) associated changes in land use pattern from suburban to rural; and (5) various vacant lands with entitlements for residential and congregate care uses (i.e., the La Casa Court and 230 La Casa Via sites). The one-story 240 La Casa Via medical office building, marks the transition point from medical to residential uses, although, because of its office appearance and location relative to the above-mentioned elements, it appears to intrude into the rural residential neighborhood.
- *San Miguel Neighborhood Transition.* The San Miguel neighborhood, which consists of primarily single family homes, is not visually linked to the JMMC area by a roadway in the same manner as the La Casa Via neighborhood. As described in section IV.A of this report (Land Use), the San Miguel Neighborhood is visually separated from the project subareas by its lower elevation, the Ygnacio Canal and associated trail, and San Miguel park.

The visibility and visual relationship of the existing medical center complex to the above transition areas is illustrated by Figure 13 and by the photographs from viewpoints 2, 3, 5, and 6.





**LEGEND**



PHOTO VIEWPOINT LOCATION



PHOTOMONTAGE VIEWPOINT LOCATION



SOURCE: Wagstaff and Associates and WAC Corporation

Figure 13  
**SELECTED  
VIEWPOINTS MAP**





**Photo 1** Ygnacio Valley Road looking northwest toward the La Casa Via intersection. Diablo Hills Golf Course is on the left.



**Photo 2** La Casa Via/Ygnacio Valley Road intersection looking northeast from Ygnacio Valley Road. As shown it is difficult to see JMMC building from this intersection.



**Photo 3** Shell Ridge (La Casa Via) Medical Office Properties looking south from La Casa Via.



**Photo 4** Main Campus Site looking east from Ygnacio Valley Road at the Ygnacio Valley Road driveway.





**Photo 5** La Casa Via southwest of the project subarea. Shell Ridge Open Space is visible in the background.



**Photo 6** Main Campus Site looking southwest from Los Cerros Avenue in the San Miguel neighborhood.

### **c. Existing Medical Center Visual Characteristics and Design Policy Considerations**

The Walnut Creek 1989 General Plan establishes urban design and land use policies which are intended to regulate the scale of development and sculpt the physical form of the city. The plan specifically addresses three aspects of built form: intensity of development, building height and mass, and setbacks from the edge of the right-of-way. Plan visual and urban design policies applicable at the project site, and existing medical center relationships with these provisions, are described below:

(1) Development Intensity. The *Community Development Element* of the city's general plan designates a maximum floor area ratio (FAR) of 0.60 for the Main Campus Site.<sup>1</sup> At an FAR of 0.47, the existing facility at the Main Campus Site is developed to nearly eighty percent of the maximum intensity currently permitted for the site. The office-designated portion of the La Casa Court site is permitted a maximum FAR of 0.50 and is currently developed to an FAR of 0.02. The remaining residentially-designated portion of the La Casa Court site, because it is residential, is not governed by an FAR maximum. The 230 La Casa Via property, which is designated for Very Low Residential in the Contra Costa County General Plan, also does not have a plan-stipulated maximum FAR.

The visual character and intensity of existing development in the project vicinity varies greatly, including (1) the fairly intensive medical office development at the La Casa Via (Shell Ridge) Medical Office Properties (see photo 3); (2) the medium-density residential character of the Diablo Hills neighborhood west of Ygnacio Valley Road and of the Montego/Tampico neighborhood south of the project subareas; (3) the low density, single-family residential/suburban character of the San Miguel neighborhood; and (4) the semi-rural character of the La Casa Via neighborhood.

(2) Building Height. All height limitations in Walnut Creek are subject to Measure A, a citizen-sponsored initiative passed in 1985 that limits structures in the city to a height no greater than six stories/89 feet or the height allowed by the applicable zoning district at the time the measure was passed, whichever is less. The Main Campus Site is governed by the maximum of six stories/89 feet, as stipulated by P-D 1647 and as required by Measure A. The La Casa Court Site is governed by a maximum height of two stories/25 feet, with some minor "top elevation" exceptions, in accordance with the zoning regulations in effect for the

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<sup>1</sup>The term "Floor Area Ratio" (FAR) refers to the ratio between a project's net site area and its total floor area. An FAR of 2.0, for example, would indicate a project floor space total which exceeds the project's net land area by two times.



site in 1985, when Measure A was approved.<sup>1</sup> The 230 La Casa Via Site is currently unincorporated, and is not governed by a Measure A-specified maximum height. (See further discussion in section V, Project Consistency with Adopted Plans and Policies.)

The existing John Muir Medical Center consists of three distinct building masses joined together as one structure. These masses range from the 93,000-square-foot, three-story Phase II building to the 102,000 square foot Phase I Building which, at eight stories, is the only component of the existing facility to exceed the six-story height limit specified in the general plan. (The Phase I Building was opened in 1965, 20 years prior to the passage of Measure A.) From Ygnacio Valley Road, the most visible existing medical center component is the five-story, 170,000 square foot Phase III building (see photo 4).

Surrounding building heights range from the two-to-four-story medical office buildings at the La Casa Via Medical Office Properties (photo 3), to the primarily one-story single family homes in the San Miguel Neighborhood. When viewed from La Casa Via, the overall building mass of JMMC rises from a landscaped surface parking lot to a much greater height than the surrounding buildings (see photo on page 128).

(3) Existing Building Setbacks. Although the *City Design Subelement* of the general plan does not establish building setbacks for the project area, it does include criteria for setbacks in "sensitive areas to preserve the views of surrounding natural areas." As a general plan-designated "Transit Oriented Scenic Corridor" with intermittent views of Mount Diablo, development along and near Ygnacio Valley Road should include setbacks which are based on the following general plan statements:

- *Most view loss occurs at the periphery of the street when new development in sensitive areas is allowed to develop at the street line.*
- *The height of buildings blocking peripheral views is not always significant because one or two floors on either side of the street corridor completely blocks any view.*

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<sup>1</sup>Pursuant to Section 10-2-1.303 of the Walnut Creek Municipal Code (zoning chapter, definitions section regarding height limitations), the "top elevation" exceptions allowed are:

"(1) Pitched roofs, with a minimum of three and twelve pitch, occupying at least seventy-five percent of the horizontal roof area and having a ridgeline [which] shall be measured four feet below the highest ridgeline unless the building height to the top of the parapet is greater, in which case the building height shall be measured to the highest point of the structure. (2) Antennas, spires, and flagpoles mounted on top of a building shall not be included as building height. (3) Solar collectors, skylights, chimneys, clerestories, and housing for elevators, stairs, and mechanical equipment, shall not be included as building height provided they do not exceed a height of twelve feet above the roof, and when combined, do not occupy more than twenty-five percent of the horizontal roof area and are designed in architectural harmony with the building. (4) Small architectural elements which add variety and landmarks to the City skyline, providing the overall building height remains within height limits. NOTE: Exceptions (1), (3) and (4) are not additive."



- *Without setback provisions, the general plan would allow significantly reduced views of the ridge line, hill areas, and Mt. Diablo from public streets and public centers in the core area.*<sup>1</sup>

As noted earlier, the narrow setbacks of the non-JMMC buildings at the Ygnacio Valley Road/La Casa Via intersection highly constrain views from Ygnacio Valley Road toward Mount Diablo and of the medical center itself. However, the buildings on the Main Campus Site are setback 200 to 300 feet from the public right-of-way, thereby affording full views of Mount Diablo from La Casa Via.

Other building setbacks in the area range from the approximately 100 feet for some buildings within the La Casa Via Medical Office Properties, to the approximately 20 to 40 foot front yard setbacks for some of the single family homes in the area.

#### **d. Vicinity Streetscapes**

As illustrated by photos 1 through 6, JMMC-vicinity streetscapes are generally suburban in character and oriented to vehicular travel, as described below:

(1) Ygnacio Valley Road. Ygnacio Valley Road is a major arterial with sidewalks and bike lanes on both sides, a landscaped center median, and standard "cobra"-style street lights are located in the center of the median. In the vicinity of JMMC, Ygnacio Valley Road is bounded generally by single- and multi-family residential uses, with commercial, medical and office uses also located along the route.

(2) La Casa Via. La Casa Via is a local roadway with two distinct streetscapes. Between Ygnacio Valley Road and Corvey Court, La Casa Via is suburban in character, with sidewalks on both sides of the street and "cobra"-style street lighting. This portion of La Casa Via is lined by surface parking lots which serve medical buildings on both sides of the street, a church, a multi-family senior housing building, and the vacant portion of the La Casa Court Site. East of Corvey Court, La Casa Via becomes a rural drive with no sidewalks, curb improvements or street lighting. This portion of La Casa via is lined by single family homes on large lots.

(3) Montego Road. Montego Road is a relatively wide, two-lane collector with sidewalks on both sides and "cobra"-style street lights. It is lined by multifamily residential, medical office, and congregate care uses.

(4) Tampico Road. Between Ygnacio Valley Road and Montego Road, Tampico Road is a collector with a landscaped center median and sidewalks on both sides. It is lined by vacant land, medical and general office uses, and congregate care uses.

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<sup>1</sup>City of Walnut Creek 1989 General Plan, p. 2-59.

#### **f. Onsite Visual Character**

(1) Main Campus Site. The visual character of the Main Campus Site as experienced from within is not particularly distinctive. However, the parking area between La Casa Via and the medical center building complex features prominent views of Mount Diablo and Shell Ridge. Views of the San Miguel neighborhood and the broader Ygnacio Valley are possible from the rear of the medical center buildings.

(2) La Casa Court Site. The built-up portion of the La Casa Court Site consists of a 2,000 square medical office building conversion which, due to its origins as a single-family house, is residential in scale and character. The remainder of the La Casa Court Site contains relatively little vegetation and provides prominent views of the Schulze Property knoll, Mount Diablo, and Shell Ridge.

(3) 230 La Casa Via. This property is entirely vacant, and contains a large number of trees, including three large native valley oaks toward the center of the site (see Figure 13). With its large native oak trees and other vegetation, and its ungraded condition, the 230 La Casa Via Site currently provides some open space value, especially as a visual open space link to the Shell Ridge Open Space which abuts the rear of the property. The site contains pine trees along the edge of La Casa Via (see photo 5) which provide a visual transition between the more developed portion of La Casa Via to the west and the more rural portion of La Casa Via to the east. Views of Shell Ridge and Mount Diablo are possible from the site.

(4) Schulze Property. The Schulze property is currently a very low density residential property, consisting of a one-story single-family home with extensive landscaping on a knoll. The knoll is especially prominent when viewed from the San Miguel neighborhood, where, due to the site's heavy landscaping, the house is not visible from some vantage points.

#### **g. Subarea Interrelationships**

Of the four project subareas, only the Schulze property and the La Casa Court Site abut one another and are linked via a shared roadway to La Casa Via. The Main Campus Site is separated from the La Casa Court Site by Walnut Creek Hospital, and the La Casa Court Site is separated from the 230 La Casa Via by the La Casa Via roadway. Other than the La Casa Via roadway access, no urban design elements currently exist to visually join these separate properties.

## **2. IMPACTS**

#### **a. Significance Criterion**

Based on Appendix G of the CEQA Guidelines, the project would be considered to have a *significant* adverse visual or urban design impact if it would "have a substantial, demonstrable

*negative aesthetic effect," or if it would "conflict with the adopted environmental plans and goals of the community."*

**b. General Impacts on Vicinity Character**

(1) Main Campus Site. As shown in Figures 4 and 8 in section III, the Master Plan would include unifying urban design features and development standards which, at buildout, would tend to improve the visual organization and appearance of the site and vicinity through introduction of building forms of more unified, harmonious design in terms of height, setback, street orientation and organization. However, the visual benefits of these Master Plan characteristics could be offset by the overall intensity of development that would be permitted on the Main Campus Site. In the suburban Ygnacio Valley neighborhood, the Master Plan would allow an "urban" scale of development by increasing the maximum allowable FAR on the Main Campus Site from 0.60 to 1.15, and by allowing new structures up to six stories/89 feet in height. The structures permitted by these development standards could be highly visible from various surrounding vantage points. Relative to the surrounding suburban-scaled development, which is comprised of one- and two-story homes and commercial structures of no more than four stories, the development intensity proposed for the Main Campus site represents a *potentially significant adverse visual and urban design impact. (V Impact 1)*

(2) La Casa Court Site. The lower-intensity level of development allowed by the Master Plan on the La Casa Court Site would not significantly affect the visual character of the Ygnacio Valley neighborhood district.

(3) 230 La Casa Via Site. The lower-intensity level of development allowed by the Master Plan on the 230 La Casa Via Site would not significantly affect the visual character of the Ygnacio Valley neighborhood district.

(4) Schulze Property. The Master Plan would not allow a change to the existing level of development on the Schulze property, and would thus not affect the visual character of the Ygnacio Valley neighborhood district.

**c. Impacts on "Gateway" Routes and Land Use Boundaries**

At buildout under the Acquisition Option (see Figure 4), the Master Plan would generally facilitate beneficial urban design effects on the two general-plan-designated important gateway areas in the project vicinity, although at partial buildout (i.e., the Nonacquisition Option shown on Figure 5) some of these beneficial effects would be unrealized due to uncompleted key design elements, as follows:

(1) "Gateway" Routes Under the Acquisition Option. If the Master Plan were built out or if more than 250,000 square feet were added to the Main Campus Site, the existing constrained visual conditions at the existing La Casa Via/Ygnacio Valley Road intersection (photo 2) would be improved. As described and illustrated in Figures 4, 6, and 7, JMMC would be required



under this scenario to (a) close La Casa Via at Ygnacio Valley Road and replace this intersection with an extension of the proposed Medical Center Way on an east-west axis in line with Mount Diablo (Roadway Improvement R-6), and (b) construct a new neighborhood entrance "gate" and "cul de sac" at the transition between the more suburban/medical portion of La Casa Via and the more rural/residential portion to the east (Buffer/Landscape Improvement B-2 and Roadway Improvement R-5).

*Medical Center Way/Ygnacio Valley Road Intersection.* Under the Acquisition Option, the new Medical Center Way/Ygnacio Valley Road intersection would provide an important and currently lacking visual connection between Ygnacio Valley Road and the main entrance to JMMC. It would also provide a distinctive view corridor from Ygnacio Valley Road to Mount Diablo. In addition, the area around the new roadway link would be a landscaped open space corridor which would both visually identify and unify the JMMC presence at this location and provide important visual relief along Ygnacio Valley Road, consistent with its overall suburban scale and character.

*La Casa Via Neighborhood Entrance Roundabout.* The new gateway element at the La Casa Via neighborhood would consist of a "neighborhood entrance/cul-de-sac" (a traffic circle) and adjacent "plaza" on both the La Casa Via and La Casa Court sites. The Master Plan design guidelines state that the island in the traffic circle shall be "emphasized with special landscaping, flower beds and/or water features," and the pavement shall include distinct textures and patterns to delineate the transition to the La Casa Via neighborhood.<sup>1</sup> To the east of the traffic circle, the Master Plan proposes "gateway monoliths or markers [to] be located symmetrically about La Casa Via, providing a further transition between the more medical-oriented and more residential portions of La Casa Via."<sup>2</sup>

The existing Ygnacio Valley Road driveway would not undergo significant physical modifications under this scenario, although it would become a dedicated city roadway.

(2) "Gateway" Routes Under the Nonacquisition Option. Under this scenario, the existing intersection at La Casa Via would be retained with its existing constraints (see Figure 5). To reach the proposed "medical center entrance court" at the main lobby entrance of the Main Campus Site (Internal Site Improvement I-1), motorists would need to (a) turn east on La Casa Via, (b) turn north onto the proposed "North-South Road" at the southwestern corner of the Main Campus Site, and (c) turn east onto Medical Center Way. In terms of readability and wayfinding, this approach to the medical center's main entrance is lacking a coherent, logical progression and, if development occurs in the southwest corner, the main entrance will not be visible until the final turning movement onto Medical Center Way.

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<sup>1</sup>JMMC Campus Master Plan Application, *Supplement One*, p. 75.

<sup>2</sup>JMMC Master Plan Application, *Supplement One*, p. 47.

This roadway configuration would result in a visually less coherent La Casa Via approach to the medical center than the existing roadway condition which, due to its direct views of the entire Main Campus and the direct driveway to the main entrance, is more comprehensible for motorists on La Casa Via-i.e., requires only one turning movement which is possible to "read" without signage. The Master Plan-proposed Nonacquisition Option La Casa Via access would represent a *significant adverse urban design impact* of the Master Plan (**V Impact 2**).

Other "gateway" aspects of the Nonacquisition Option would be identical to those noted for the Acquisition Option above.

(3) Land Use Boundaries Under Acquisition and Nonacquisition Options. As described and illustrated by Figures 6 and 7, the Master Plan-proposed land use buffers between the project and the La Casa Via and San Miguel neighborhoods would be identical under both the Acquisition and Nonacquisition options. The project's visual impact along these boundaries, however, would vary, as described below:

*La Casa Via Neighborhood Transition.* The Master Plan requires the construction of a landscaped trail (the realigned Briones/Mount Diablo trail) and buffer along the boundary between the La Casa Via neighborhood and the La Casa Court and 230 La Casa Via sites (Improvement B-4 on Figure 6). Because the maximum permitted building height for the La Casa Court Site would be two stories/25 feet, and the maximum permitted building height for the 230 La Casa Via Site would be two stories/29 feet, the proposed trail and buffer would be expected to adequately mitigate project visual impacts on the La Casa Via neighborhood to below the level of significance.

*San Miguel Neighborhood Transition.* Similar to the La Casa Via neighborhood edge, the Master Plan requires a landscaped buffer along the project's San Miguel neighborhood boundary (Improvement B-6 on Figure 6). However, as illustrated by Figures 8 and 14, the Master Plan would allow a much greater building mass at this boundary. The six-story/89-foot building height allowed at this boundary would be located within the same general area occupied by the existing complex of JMMC buildings, including the eight-story Phase I Building and the five-story Phase III Building. This six-story/89-foot component would therefore not represent a significant departure from the existing building mass at this location, and would thus represent a less than significant impact of the project.

The Master Plan would also allow a three-story/49'-6" high structure to the north of the existing service road, adjacent to the Ygnacio Canal. As illustrated in Figures 2 (Existing Project Site and Vicinity Map) and 10 (Proposed Master Plan--Section A) in section III of this report, this permitted building envelope, which the applicant has indicated may be a parking structure, would replace an existing undeveloped 213-foot-high knoll. The existing knoll, which contains seven native oak trees, serves as an important visual feature and buffer between the JMMC buildings on the Main Campus Site and the San Miguel neighborhood; its importance as a visual buffer would become even more important as the Master Plan approaches buildout. Building construction on this knoll, or within any of the existing onsite



open space area located north of the existing service road, would represent a *significant adverse visual impact (V Impact 3)*.

#### **d. Project Building Mass Characteristics and Design Policy Relationships**

The project would permit the construction of substantially more floor area than currently exists at the Main Campus, La Casa Court and 230 La Casa Via subareas. Because the project would allow a flexible future allocation of floor area within the permitted building envelopes, it is not possible to know exactly how this massing will be distributed. The maximum permitted building volume envelope as illustrated in isometric form in Figure 8, and the maximum permitted FAR, as illustrated relative to building envelope, by Figures 14 through 16, are the primary indicators of the building massing which can be anticipated under the proposed Master Plan.

Project relationships to pertinent city urban design policies are discussed below:

(1) Building Intensity. As discussed in section 1.c(1) above, the maximum FAR for the Main Campus Site, set by the city's current general plan, is 0.60. In order to achieve the level of development which would ultimately be allowed by the Master Plan, the application includes a request for a General Plan Amendment to increase the maximum FAR for the Main Campus Site to 1.15. The FAR for the La Casa Court and 230 La Casa Via sites would be 0.48 and 0.55, respectively.

*Maximum Building Envelopes vs. Maximum FARs.* Maximum FARs for each of the three main project subareas are illustrated in Figures 14 through 16. As can be seen in these figures, the proposed maximum building volume envelope is substantially larger than the proposed maximum FAR at each of the subareas. Within these envelopes, the Master Plan would allow up to 535,000 square feet of new development at the Main Campus Site, a nearly 150 percent increase in the size of the existing medical center. The La Casa Court Site would be allowed an additional 148,000 square feet of development, an amount equal to 74 times the size of the existing structure on the property. The currently-vacant 230 La Casa Via site would be allowed 150,000 square feet of new development.

*Parking Structures Excluded from FAR Limits.* Because above-ground parking is not included in city (and Master Plan) FAR calculations, the maximum FARs proposed by the Master Plan do not reflect the total potential building mass if above-ground parking structures are constructed. As most of the existing surface parking will be displaced with internal site improvements and new structures (see Figures 6 and 7), it can be anticipated that a high proportion of project parking spaces will be provided in either above-ground or subsurface parking garages. Assuming that new parking is provided based on code requirements as described in section IV.C (Transportation and Parking), it can be anticipated that the three project subareas may include a total of approximately 2,932 parking spaces.





SOURCE: Thistlethwaite Architectural Group

**JOHN MUIR MEDICAL CENTER MASTER PLAN EIR**

City of Walnut Creek, CA

Wagstaff and Associates

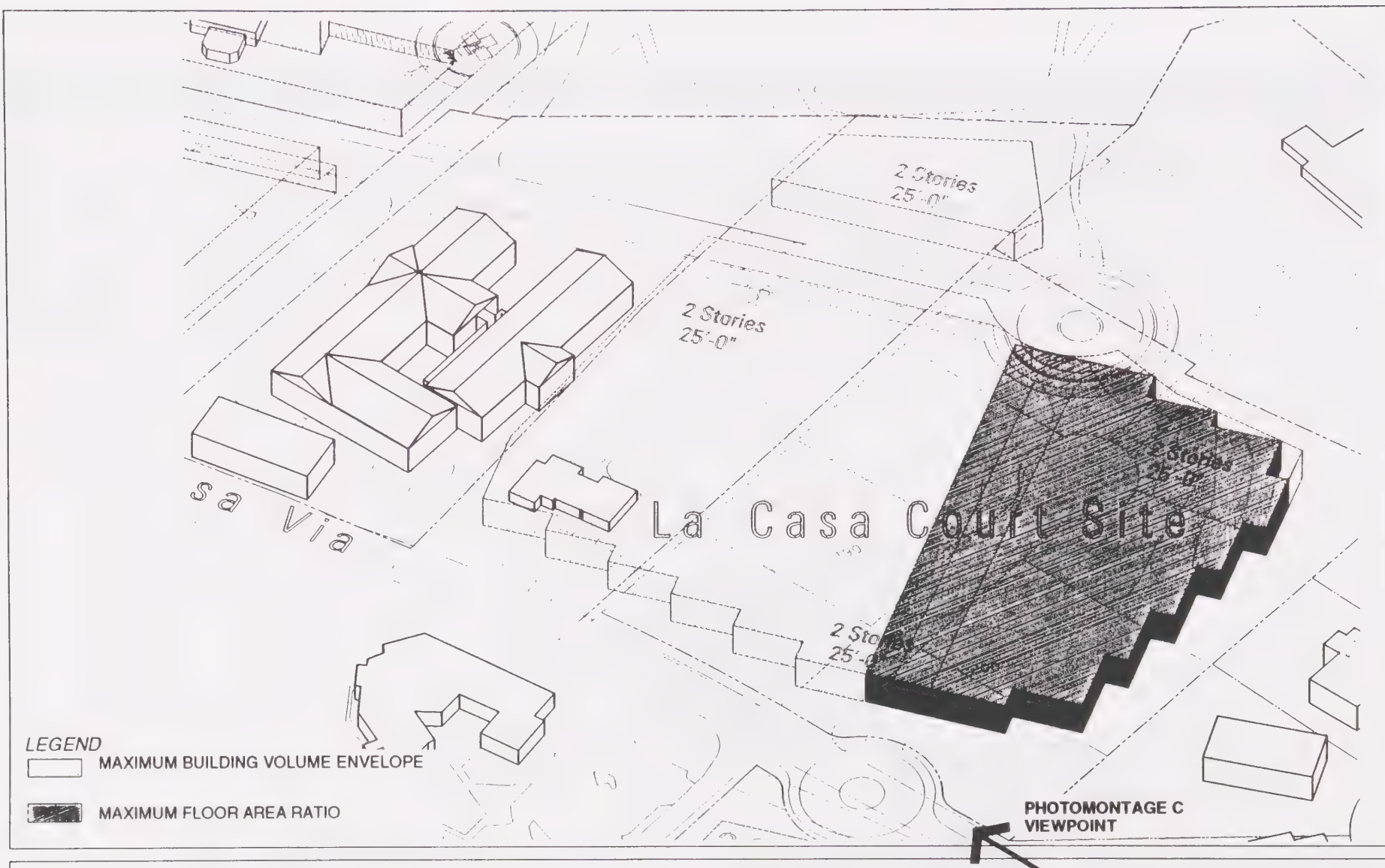


Figure 15

# **APPLICANT'S ISOMETRIC FOR LA CASA COURT SITE** **MAXIMUM ALLOWABLE FAR AND MAXIMUM BUILDING ENVELOPE** **-- SEE PHOTOMONTAGE C**



north

SOURCE: Thistlethwaite Architectural Group



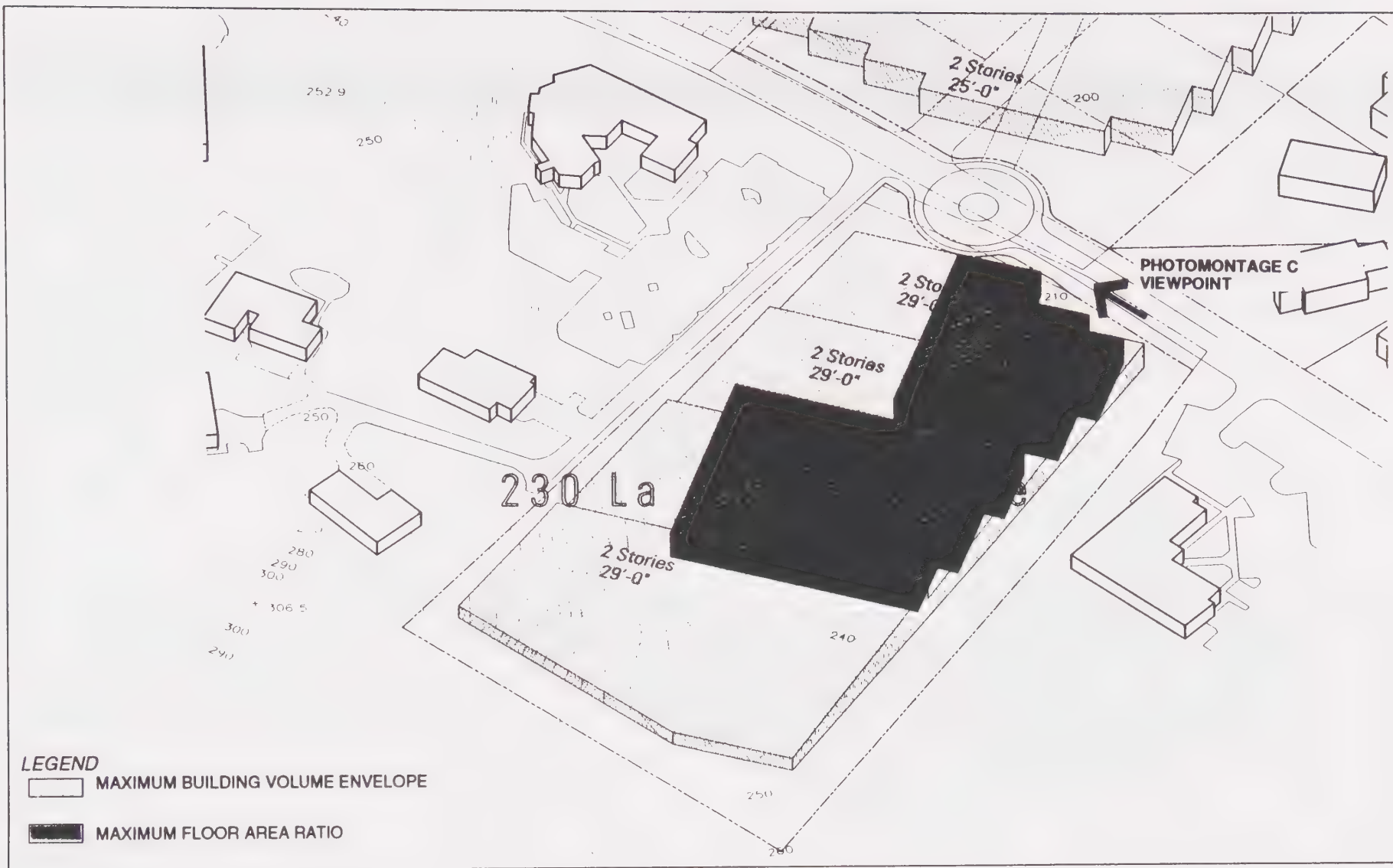


Figure 16

**APPLICANT'S ISOMETRIC FOR 230 LA CASA VIA SITE**

**MAXIMUM ALLOWABLE FAR AND MAXIMUM BUILDING ENVELOPE**

**--SEE PHOTOMONTAGE C**



north

SOURCE: Thistlethwaite Architectural Group



The Master Plan design guidelines indicate that all of the parking for the La Casa Court and 230 La Casa Via sites will be provided on surface lots. Assuming for the sake of this study that parking would be distributed proportionately among the three main project subareas, this would equate to approximately 733 total spaces on the La Casa Court and La Casa Via sites. It can also be conservatively assumed that ten percent of the remaining 2,199 Main Campus Site parking spaces would be provided in surface lots, resulting in a total of approximately 1,985 spaces which may be anticipated to be provided within parking garages at Master Plan buildout.

At a rate of 325 square feet per parking space, 1,985 parking spaces would result in approximately 645,125 square feet of parking garage floor area, equivalent to a 78 percent increase in the total FAR (building and parking structures) allowed by the project. Even assuming half that number of parking spaces in above-ground parking garages (i.e., 993 spaces), the building volume necessary to accommodate these spaces would encompass 322,725 square feet of floor area, equivalent to a 39 percent increase in the total actual FAR (buildings and parking structures) permitted by the project.

The implications of the potential mass of parking structures on the Main Campus Site raises important issues regarding the importance of parking structure design, which is not thoroughly addressed in the Master Plan. The parking structure components could become dominant visual elements, prominently visible from both the internal circulation system and the surrounding local roadways. Without specific design guidelines for these parking structures, it is possible that they could detract from the overall urban and pedestrian character envisioned for the Main Campus Site. This would represent a *potentially significant adverse visual and urban design impact* of the project (**V Impact 4**).

(2) Building Height. Master Plan provisions regarding building height would have the following visual and urban design implications:

*(a) Main Campus Site.* At the Main Campus Site, the proposed Master Plan shows a maximum building height of six stories/89 feet. This height allowance would conform to the maximum height of six stories/89 feet for new construction allowed by Measure A, and thus would represent a less than significant impact.

*(b) La Casa Court Site.* At the La Casa Court Site, the Master Plan would allow a maximum building height of two stories/25 feet, which would be consistent with the maximum height of two stories/25 feet permitted by Measure A, and thus would represent a less than significant impact.

*(c) 230 La Casa Via Site.* At the 230 La Casa Via Site, the Master Plan would allow a maximum building height of two stories/29 feet. This would not be inconsistent with the Contra Costa County General Plan, which does not establish a maximum height for properties designated *Very Low Density Residential*. In addition, this proposed maximum height would

be consistent with Measure A, which would apply to the 230 La Casa Via Site once it is annexed to the city of Walnut Creek.

(3) Setbacks. By requiring average setbacks of 25 to 29 feet along La Casa Via and Medical Center Way, the project appears consistent with applicable general plan setback criteria. Under the Acquisition Option, the required primary entrance drive (Improvement K-6 on Figure 6) would effectively result in a continuously wide setback area from Ygnacio Valley Road, consistent with general plan setback policies.

#### **e. Impacts on Vicinity Streetscapes**

The project would generally have positive effects on vicinity streetscapes, as follows:

(1) Ygnacio Valley Road. Under the Nonacquisition Option, the project would have little effect on the Ygnacio Valley Road streetscape. Under the Acquisition Option, the extension of Medical Center Way to Ygnacio Valley Road and the construction of a landscaped open space area for the remainder of the 1515 Ygnacio Valley Road site would dramatically improve the appearance of the area around the existing La Casa Via/Ygnacio intersection (see Figures 4 and 9). (Views from Ygnacio Valley Road are discussed in section f(4) below.)

(2) La Casa Via. Under both the Acquisition and Nonacquisition options, the streetscape of La Casa Via would be improved with additional street trees, new pavement materials and textures, and the proposed gateway and traffic circle at the entrance to the La Casa Via neighborhood. (Views from the La Casa Via roadway, which would be substantially altered by the project, are discussed in sections f(1) and f(3) below.)

(3) Montego Road. Under both the acquisition and nonacquisition scenarios, the project would improve the appearance of the Montego/La Casa Via intersection with additional landscaping features and pavement materials and textures. The remainder of the Montego Road streetscape would be unaltered by the Master Plan.

(4) Tampico Road. The Master Plan would not have an effect on the Tampico Road streetscape.

#### **f. Impacts on Surrounding Vantage Points**

Photomontages have been prepared from three vantage points to evaluate the potential visual impacts of the project and illustrated on Figures 14, 15, and 16. These photomontages utilize computer-simulated isometrics prepared by the applicant for the Main Campus, La Casa Court and 230 La Casa Via sites. These applicant-prepared isometrics illustrate (1) maximum building volume envelope (i.e., minimum setbacks and maximum building heights) and (2) an example of maximum floor area within the building volume envelope.

The visual simulations that follow were prepared independently for the EIR authors by Square One Productions, to illustrate building intensity, mass, shape, height and scale relationships only. ***It should be noted that for conservative EIR purposes, mature project landscaping, and architectural details such as building form articulation, windows, textures, materials and tone, are not shown. In addition, for purposes of clarity, existing landscaping has also been removed from the "after" view of photomontages B and C; since the Master Plan does not require the retention of the landscaping, it has been removed in this simulation to depict the "worst case" visual impact potential, although it may actually be retained depending on the buildout scenario.***

***These unillustrated architectural design and landscaping aspects would be expected to add visual interest and substantially soften the visual impact of the project.***

(1) La Casa Via Looking East (Photomontage A). The most encompassing view of the existing medical center and Mount Diablo is from La Casa Via southeast of the Ygnacio intersection. This view would undergo substantial transformation as a result of Master Plan buildout.

A "before" and "after" photomontage simulation looking **east** from this La Casa Via vantage point is shown in Figures 17 and 18. The location of this photomontage "A" is mapped on Figures 13 and 14.

The simulation on Figure 18 illustrates how the project could create a "street wall" effect on the northeast side of La Casa Via. In replacing an existing view of a large parking lot, this could represent a beneficial effect of the project. However, these elements would also totally obscure existing views of Mount Diablo and the surrounding foothills. Although this effect would be partially mitigated under the Acquisition Option by the extension of Medical Center Way (which would open up views of Mount Diablo to Ygnacio Valley Road, as suggested by the applicant's rendering reproduced in Figure 19), the complete loss of Mount Diablo views from this segment of La Casa Via would represent a *significant adverse visual impact* of the Master Plan (***V Impact 5***).

The following additional consideration, while not a significant visual impact of the proposed project, is also important in demonstrating the urban design impact (***V Impact 2***) identified in section c(2) above:

The simulation on Figure 18 also illustrates how development of the southwest corner of the Main Campus Site would obscure the view of the medical center's main entrance from La Casa Via. Under the Nonacquisition Option, this could result in problematic wayfinding for visitors and patients of JMMC because the main entrance would not be clearly visible and access would require two or more turning movements, as discussed in 1.b(2) above. With extension of Medical Center Way to Ygnacio Valley Road under the Acquisition Option, this





Figure 17

**PHOTOMONTAGE A--BEFORE  
LOOKING EAST FROM LA CASA VIA**

SOURCE: Square One Productions





MAXIMUM F.A.R. PERMITTED BY MASTER PLAN

NOTE: This massing study illustrates maximum F.A.R. and maximum building volumes only. No architectural forms or details within the envelopes, or future landscaping, are shown.

SOURCE: Square One Productions

Figure 18  
**PHOTOMONTAGE A--AFTER**  
**LOOKING EAST FROM LA CASA VIA**

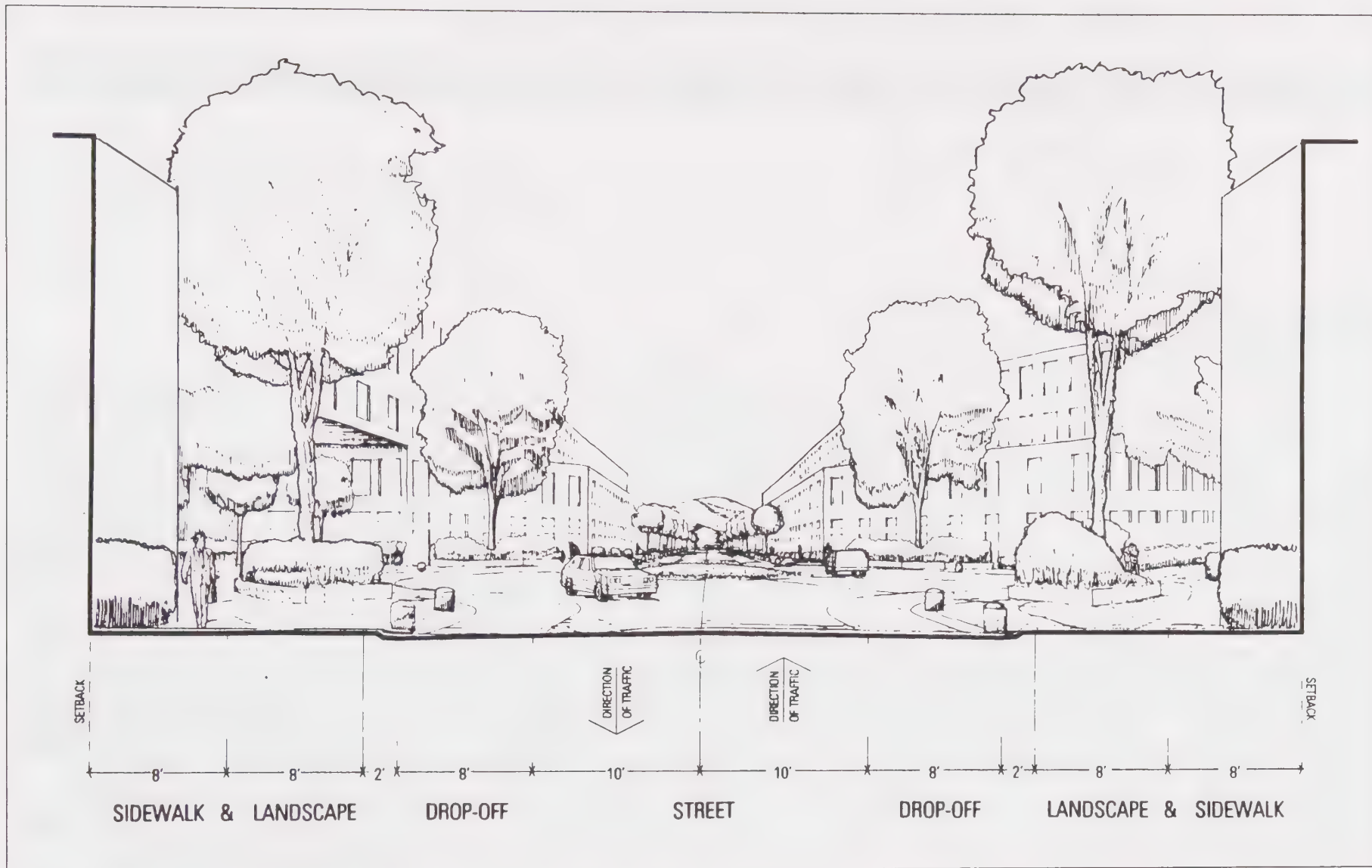


Figure 19  
**APPLICANT'S RENDERING OF MEDICAL CENTER WAY  
 IMPROVEMENTS I-3 AND I-5 (SEE FIGURE 6)**

SOURCE: Thistlethwaite Architectural Group



would not be a problem because direct access to the main lobby would be possible from Ygnacio Valley Road.

(2) San Miguel Neighborhood Looking Southwest (Photomontage B). At buildout, the proposed project would be visible from many parts of the San Miguel neighborhood. The most encompassing view of the Main Campus Site from the San Miguel neighborhood is possible from a vantage point just north of the Main Campus Site in the vicinity of San Miguel neighborhood park. A "before" and "after" photomontage simulation of this southwest view from the edge of San Miguel Park is shown in Figures 20 and 21. (The location of this photomontage "B" is also mapped on Figures 13 and 14.)

As shown in Figures 14 and 21, the isometric and photomontage illustrations assume that a majority of the building area on the Main Campus Site will be on the southwestern portion of the site (i.e., in the area now occupied with surface parking). This assumption tends to minimize the simulated visual effect of the project on the San Miguel neighborhood from this vantage point. However, alternative FAR scenarios could result in greater building mass on the northeastern edge of the Main Campus Site and therefore greater impacts on views from the San Miguel neighborhood. Nevertheless, with the exception of *V Impact 3* identified in section c(3) above (the impact of construction on the existing knoll to the north of the service road), the depicted and the possible alternative FAR scenarios would not represent a significant adverse visual impact on the San Miguel neighborhood.

No significant adverse visual or urban design impacts have been identified from this photomontage B vantage point.

(3) La Casa Via Looking Northwest (Photomontage C). Master Plan buildout on the La Casa Court and 230 La Casa Via sites would be primarily visible from La Casa Via in the vicinity of the La Casa Via neighborhood. The applicant's rendering of the proposed La Casa Via traffic circle is shown in Figure 24. A "before" and "after" photomontage simulation of the northwest view on La Casa Via from the edge of the La Casa Via neighborhood is shown on Figures 22 and 23. (The location of photomontage "C" is also mapped on Figures 13, 15, and 16.) No significant adverse visual impacts on La Casa Via views looking northwest have been identified.

(4) Ygnacio Valley Road. Master Plan development of the Main Campus Site would increase the building mass of the medical center visible when traveling "westbound" on Ygnacio Valley Road in the vicinity of Heather Farms Park. From this vantage point, the rear of the medical center is currently visible in the distance.

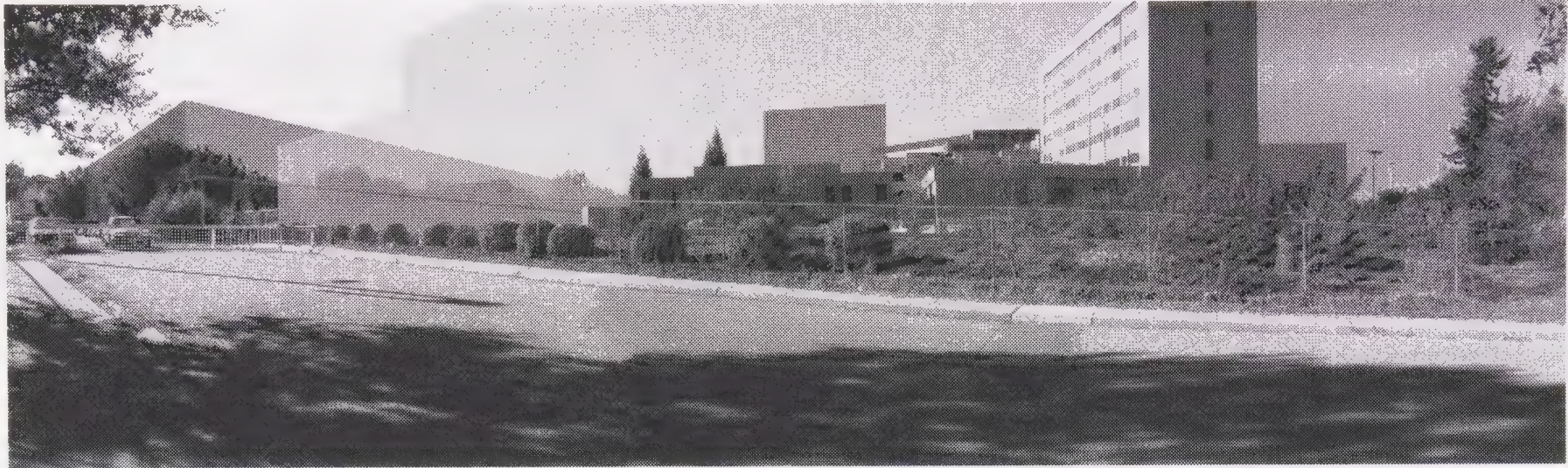
Under the Acquisition Option, the view of the entire Main Campus Site would open up from Ygnacio Valley Road with the demolition of the existing medical office building at 1515 Ygnacio Valley Road and the construction of a new vehicular entrance and an open space component at this location. This change, with proper design control, could represent a significant visual and urban design improvement, substantially improving driver recognition of



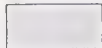
Figure 20  
**PHOTOMONTAGE B--BEFORE**  
LOOKING SOUTHWEST FROM  
SAN MIGUEL PARK BOUNDARY

SOURCE: Square One Productions





MAXIMUM F.A.R. PERMITTED BY MASTER PLAN



MAXIMUM BUILDING ENVELOPE PERMITTED BY MASTER PLAN

NOTE: This massing study illustrates maximum F.A.R. and maximum building volumes only. No architectural forms or details within the envelopes, or future landscaping, are shown. Existing landscaping, which may or may not be retained at Master Plan buildout, has been deleted from this image for purposes of clarity.

SOURCE: Square One Productions

Figure 21  
**PHOTOMONTAGE B--AFTER**  
**LOOKING SOUTHWEST FROM**  
**SAN MIGUEL PARK BOUNDARY**





Figure 22

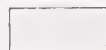
**PHOTOMONTAGE C--BEFORE**  
**LOOKING NORTHWEST FROM LA CASA VIA**

SOURCE: Square One Productions





MAXIMUM F.A.R. PERMITTED BY MASTER PLAN



MAXIMUM BUILDING VOLUME ENVELOPE PERMITTED BY MASTER PLAN

NOTE: This massing study illustrates maximum F.A.R. and maximum building volumes only. No architectural forms or details within the envelopes, or future landscaping, are shown. Existing landscaping, which may or may not be retained at Master Plan buildout, has been deleted from this image for purposes of clarity. No Attempt has been made to reproduce distant views of existing or proposed structures which may become visible as a result of the removal of this existing landscaping.

SOURCE: Square One Productions

Figure 23

## PHOTOMONTAGE C--AFTER LOOKING NORTHWEST FROM LA CASA VIA



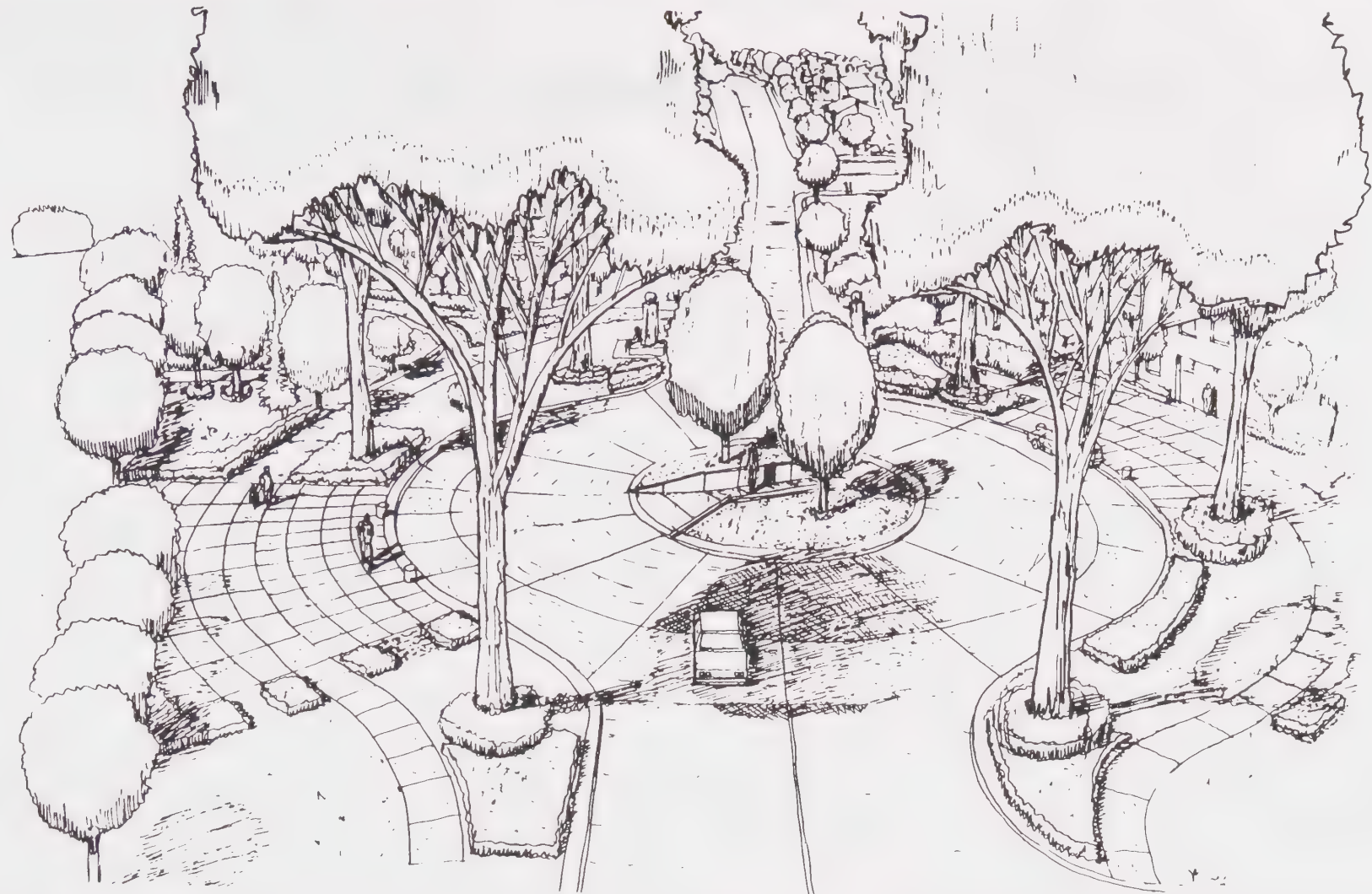


Figure 24  
**APPLICANT'S RENDERING OF  
NEIGHBORHOOD ENTRANCE  
IMPROVEMENT R-5 (SEE FIGURE 6)**

SOURCE: Thistlethwaite Architectural Group



the JMMC complex from Ygnacio Valley Road. The benefit of this change would be partially offset by the loss of intermittent views of Mount Diablo from Ygnacio Valley Road as the project is built out; but because these views are already constrained by the existing medical center, the PG&E transmission towers, and the medical office building at 1515 Ygnacio Valley Road (see photo 2), this would represent a less than significant effect.

**g. Project Impacts on Onsite Visual Factors**

(1) Main Campus Site. The Master Plan would bring an "urban" character to the Main Campus Site. Whereas the existing building mass of the medical center rises from a large surface parking lot (as shown by the photo on page III--5), the building envelope of the Master Plan would allow a solid building mass over nearly the entire site (as shown by Figure 8 and 14). Although this would reduce the visibility of Mount Diablo and the surrounding foothills from the site, views of Mount Diablo from within existing Main Campus buildings would generally be maintained, and new views from within project structures would be created.

The Master Plan would bring a sense of order and symmetry to the onsite vehicular circulation system. Whereas the existing circulation system is barely distinguishable from the surface parking which surrounds it, the new circulation system would consist of (1) Medical Center Way, a tree-lined, boulevard-style street with a central axis on Mount Diablo and a traffic island at the main entrance to the medical center; (2) a secondary "north-south road" which would connect at right angles with Medical Center Way; and (3) a service road along the rear of the entire site, connecting Ygnacio Valley Road with La Casa Via.

The on-site pedestrian circulation system would also be improved with implementation of the Master Plan. Sidewalks adjacent to Medical Center Way and the "north-south road" would allow pedestrians to access the main entrance without traversing surface parking lots. The proposed "pedestrian link" between the main entrance court of the hospital and La Casa Via, which is illustrated in Figure 8, would both facilitate pedestrian circulation and enhance the symmetry of the circular entrance court.

No significant adverse visual or urban design impacts have been identified (although development of the surface parking area could have a significant adverse impact on views looking east from La Casa Via roadway-- *V Impact 5*--as discussed in section f(1) above).

(2) La Casa Court Site. In contrast to the urban character of the Main Campus Site, the Master Plan would allow the mostly-undeveloped La Casa Court site to be developed to a more suburban or "residential" scale, with maximum two-story buildings and surface parking. Due to the natural slope of the site, surface parking at the rear could require substantial grading. The visual impacts of this grading would be evaluated through the design review and use permit process required prior to project construction.

No significant adverse visual or urban design impacts have been identified.

(3) 230 La Casa Visa Site. Master Plan design guidelines for the 230 La Casa Via Site are similar to those described for the La Casa Court Site above, although no traffic circle is envisioned for the rear of the site (see Figure 16). The potential loss of native oak trees on this site would represent a significant adverse impact which is discussed in section IV.K, Vegetation and Wildlife.

No significant adverse visual or urban design impacts have been identified.

(4) Schulze Property. The Master Plan does not establish design standards or guidelines for the Schulze Property. Development of the Schulze Property for non-residential use would require a future amendment of the P-D ordinance associated with the Master Plan and its own accompanying environmental review.

No significant adverse visual or urban design impacts have been identified.

#### **h. Project Subarea Interrelationships**

(1) General. The urban design and circulation system proposed in the Master Plan would serve to visually link the project subareas. In particular, the east-west alignment of Medical Center Way and the north-south alignment of the secondary routes linking the La Casa Court and 230 La Casa Via sites, and associated street trees and pavement treatments, should establish a formal visual interrelationship between the three sites.

(2) Nonacquisition Option. Under the Nonacquisition Option, the Master Plan would require a service road connection between the Main Campus and La Casa Court Sites which would go around the back of the existing Walnut Creek Hospital. An alignment and associated design guidelines have not been established for this connection, which would be prominently located at the terminus of Medical Center Way. Without design guidelines for the treatment of this connection, it is impossible to comment on how it would function or if it is even feasible. It does appear that without the Medical Center Way link, the strong visual relationship between the Main Campus and La Casa Via Site would be deferred or eliminated. These adverse roadway link factors represent a *potentially significant adverse urban design impact* of the Master Plan (*V Impact 6*).

### **3. MITIGATIONS**

#### **a. General Impacts on Vicinity Character**

(1) Main Campus Site. (*V Impact 1*) No feasible mitigations have been identified to reduce the impact of proposed Main Campus Site development on the visual character of the vicinity; the change here would represent a *significant unavoidable adverse visual and urban design impact* of the Master Plan.

(2) La Casa Court Site. No significant adverse visual or urban design impacts have been identified; no mitigation measures are required.

(3) 230 La Casa Via Site. No significant adverse visual or urban design impacts have been identified; no mitigation measures are required.

**b. Impacts on "Gateway" Routes and Land Use Boundaries**

(1) "Gateway" Routes Under the Acquisition. No significant adverse visual or urban design impacts have been identified; no mitigation measures are required.

(2) "Gateway" Routes under the Nonacquisition Option. (***V Impact 2***) The following measure would reduce the identified adverse visual impact to a less than significant level:

- The southwestern corner of the Main Campus Site (bounded by the "north-south road," Medical Center Way, the "pedestrian link," and La Casa Via in Figure 5) shall not be developed until the adjacent 1515 Ygnacio Valley Road property is purchased and developed with the extension of Medical Center Way. By keeping this area free of building mass until Medical Center Way is extended to Ygnacio Valley Road, this measure will allow driver wayfinding from La Casa Via under the Nonacquisition Option without being totally dependent on signage. This measure would also preserve views of Mount Diablo from La Casa Via until Medical Center Way is extended to Ygnacio Valley Road.

(3) Project Impacts on Land Use Boundaries. Mitigations for identified visual and urban design impacts at the project boundaries are described below:

*La Casa Via Neighborhood*. No significant adverse visual or urban design impacts have been identified; no mitigation measures are required.

*San Miguel Neighborhood*. (***V Impact 3***) The following measure would reduce the identified land use boundary impact of the project on the San Miguel neighborhood to a less than significant level:

- On the Main Campus Site, development shall not be permitted north of the service road (north of the feature marked "I-2" on Figure 6 in section III of this EIR). The existing topography contours of the knoll at this location shall be retained.
- Also, implement the mitigation measure identified for *LU Impact 1* in section IV.A.3 of this EIR.

**c. Project Building Mass Characteristics and Design Policy Relationships**

(1) Building Intensity. (***V Impact 4***) The following measures would reduce identified adverse building intensity impacts to a less than significant level:



- All covered at- and above-grade parking shall be counted toward the overall permitted FAR at a rate of 50 percent (i.e, one square foot of covered above- or at-grade parking would contribute 0.5 square feet toward the overall permitted FAR).
- Detailed design guidelines and development standards shall be developed for above-ground parking structures prior to city adoption of the Master Plan.

(2) Building Height/Setbacks. No significant adverse visual or urban design impacts have been identified; no mitigation measures are required.

#### **d. Impacts on Vicinity Streetscapes**

No significant adverse visual or urban design impacts have been identified; no mitigation measures are required.

#### **e. Impacts on Surrounding Vantage Points**

(1) La Casa Via Looking East. (V Impact 5) No feasible mitigation measures have been identified to reduce the identified visual impact on La Casa Via, looking east, to a less than significant level, although implementation of the measure noted for *V Impact 4* above would improve the project appearance from this vantage point if parking structures are developed on La Casa Via. Even with the implementation of this measure, however, the project-related loss of Mount Diablo views from La Casa Via would represent a *significant unavoidable adverse impact* of the Master Plan.

(2) San Miguel Neighborhood Looking Southwest. No significant adverse impacts have been identified; no mitigation measures are required.

(3) La Casa Via Looking Northwest. No significant adverse impacts have been identified; no mitigation measures are required. However, a comparison of the "before" view for Photomontage C (Figure 22), showing the existing trees near this location, and the "after" view for Photomontage C (Figure 23), showing the same view with these trees removed, illustrates the beneficial effect of existing trees in reducing (screening) the visual impacts of future development on the La Casa Court and 230 La Casa Via sites. *The city may wish to consider requiring that these trees be retained as a condition of Master Plan approval.*

(4) Ygnacio Valley Road. No significant adverse visual or urban design impacts have been identified; no mitigation measures are required.

#### **f. Impacts on Onsite Visual Factors**

(1) Main Campus Site. No significant adverse visual or urban design impacts have been identified; no mitigation measures are required.

(2) La Casa Court Site. No significant adverse visual or urban design impacts have been identified; no mitigation measures are required.

(3) 230 La Casa Via Site. No significant adverse visual or urban design impacts have been identified; no mitigation measures are required.

(4) Schulze Property. No significant adverse visual or urban design impacts have been identified; no mitigation measures are required.

**g. Project Subarea Interrelationships**

(1) Nonacquisition Option. (*V Impact 6*) To reduce the identified urban design impact of the Nonacquisition Option on subarea interrelationship to a less than significant level, implement the mitigation identified for *LU Impact 1* in section IV.A (Land Use).





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## C. TRANSPORTATION AND PARKING

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This chapter describes existing and projected transportation conditions in the project vicinity, estimates the impacts of the proposed Master Plan in combination with other anticipated cumulative development in the area on these circulation conditions, and recommends roadway and other transportation system improvements necessary to mitigate these transportation impacts. The chapter also includes an evaluation of the proposed Master Plan parking provision for adequacy and convenience.

### 1. SETTING

#### a. Vicinity Roadway Network

(1) Regional Access. As illustrated in Figure 1 (section III, Project Description), regional access to the proposed project is provided by two highways, State Route 24 and Interstate 680, both to the west. Interstate 680 is a north-south multi-lane freeway that provides regional access through Contra Costa County (between Martinez and San Ramon), and extends beyond the county boundaries north to I-80 in Solano County and south to I-280 in Santa Clara County. State Route 24 (SR 24) is an east-west multi-lane freeway that provides regional access west to Oakland. From the project vicinity, both of these freeways can be reached via Ygnacio Valley Road and the Ygnacio Valley/I-680 interchange, which is approximately 2.5 miles west of the project site. Because no onramp from Ygnacio Valley Road is provided for northbound I-680, motorists on Ygnacio Valley Road wishing to access I-680 north must travel on North Main Street to the North Main bypass onramp.

(2) Local Roadway System. The local circulation system serving the project vicinity is diagrammed in Figure 28. The John Muir Medical Center is located northeast of the Ygnacio Valley Road/La Casa Via intersection. Streets that provide local and sub-regional access to and around the medical center vicinity include Ygnacio Valley Road, Walnut Avenue, Bancroft Road, San Carlos Drive, North San Carlos Drive, La Casa Via, Kinross Drive, Marchbanks Drive, Tampico, Montego, and Civic Drive. John Muir Medical Center's main lobby entrance faces south toward La Casa Via. A brief description of each local roadway component follows:

(a) Ygnacio Valley Road. Ygnacio Valley Road is the major "east/west" arterial route in the Walnut Creek-Ygnacio Valley area and provides direct access to the project site. In the vicinity of the project, Ygnacio Valley Road is oriented in a northeast/southwest direction. The entire roadway is designated as a *major arterial* in both city and county general plans, and



\*Numbered Locations Identify Study Intersections.



north

SOURCE: Omni Means, Ltd.

Figure 28  
**LOCAL ROADWAY SYSTEM  
AND STUDY INTERSECTIONS**

has three travel lanes in each direction in the project vicinity. A highly used commuter route, Ygnacio Valley Road serves residential and employment centers in eastern Walnut Creek and also acts as a principal through-route for commuters travelling between the I-680/SR 24 interchange and Walnut Creek, east Concord, Clayton, and Eastern Contra Costa County.

(b) Walnut Avenue. Walnut Avenue is oriented in a north-south direction between Ygnacio Valley Road and Oak Grove Road. Designated by the city general plan as an *arterial* street, Walnut Avenue has two travel lanes for its entire length and provides access to residential neighborhoods east of the project site.

(c) Bancroft Road. Walnut Avenue becomes Bancroft Road north of Ygnacio Valley Road. The designated *arterial* route is oriented north-south between Ygnacio Valley Road and Treat Boulevard and has four travel lanes. Bancroft Road provides access to residential areas and commercial areas closer to Treat Boulevard.

(d) San Carlos Drive. San Carlos Drive (south of Ygnacio Valley Road) is oriented in a north-south direction between Ygnacio Valley Road and Las Lomas Way and has two travel lanes. Designated as a *collector* street, San Carlos drive provides access to the San Miguel neighborhood east of the project site.

(e) North San Carlos Drive. North San Carlos Drive is a two-lane local street north of Ygnacio Valley Road. The route provides access to the city's Heather Farms Park, including its swimming, ballfield and other recreational facilities.

(f) La Casa Via. La Casa Via is oriented in a southeasterly direction from Ygnacio Valley Road and provides direct access to John Muir Medical Center. The route serves the JMMC Main Campus Site via the medical center's second, "south driveway," and also serves the Shell Ridge (La Casa Via) medical office buildings, and residential areas further southeast of Ygnacio Valley Road." La Casa Via is a two-lane, city-designated *collector*.

(g) John Muir Medical Center "North Driveway". The JMMC north driveway is a wide, two lane facility and one of two primary access drives to the medical center's Main Campus Site. Signalized at its intersection with Ygnacio Valley Road, this access is used by hospital staff and outpatients at the Surgi-Center, as well as patients and visitors travelling to and from the Concord area.

(h) Kinross Drive. Kinross Drive is located directly opposite La Casa Via from Ygnacio Valley Road. A narrow two-lane, city-designated *local street*, Kinross Drive provides exclusive access to a multifamily complex on the northwest side of Ygnacio Valley Road.

(i) Marchbanks Drive. Marchbanks Drive is a wide, two-lane, city-designated *collector* located on the northwest side of Ygnacio Valley Road. The loop road intersects Ygnacio Valley Road at two different locations and provides access to the Diablo Hills residential and recreational areas. The northeasternmost Marchbanks/Ygnacio intersection is a three-way,



"T" facility located between San Carlos Drive and the JMMC north driveway (right-turns-only). The second intersection is a four-way facility with Marchbanks Drive forming the north leg of the Ygnacio Valley/Tampico intersection.

(j) Tampico. Tampico is oriented in a southeasterly direction from Ygnacio Valley Road and provides access to residential areas. A two-lane, city-designated *collector* between Montego and Ygnacio, Tampico also forms a loop road which intersects Montego at two locations.

(k) Montego. Montego is a two-lane, city-designated *collector* that generally parallels Ygnacio Valley Road in a southeasterly direction. The route connects Ygnacio Valley Road and La Casa Via, and provides an alternative eastbound route to the JMMC campus, Shell Ridge medical offices, and the La Casa Via residential neighborhood.

(l) Civic Drive. Civic Drive extends in a north-south direction between California Street and Parkside Drive. Designated in the city's general plan as an *arterial* street, Civic Drive provides primary access to retail-commercial areas and downtown.

## **b. Intersections**

(1) Study Intersections. Intersections, rather than midblock roadway segments, are almost always the critical capacity controlling locations for urban and suburban roadway networks. Eight intersections were selected by the city as those most likely to be affected by the project and thus warranting analysis in this EIR. These facilities are numbered on Figure 28 and listed below:

- Ygnacio Valley/Civic (signalized),
- Ygnacio Valley/Marchbanks-Tampico (signalized),
- Ygnacio Valley/La Casa Via (signalized),
- Ygnacio Valley/John Muir Medical Center (signalized),
- Ygnacio Valley/San Carlos (signalized),
- Ygnacio Valley/Walnut-Bancroft (signalized),
- Montego/Tampico (four-way-stop), and
- Montego/La Casa Via (minor street stop).

(2) Intersection Level of Service Concept. In order to measure and describe the operational status of a local roadway network, traffic engineers and planners commonly use a grading system called Level of Service (LOS). The LOS grading system typically used involves a rating scale from LOS A, indicating relatively free-flow traffic conditions with little or no delay (zero to five seconds) at intersections, down to LOS E, representing unstable flow conditions with traffic volumes at or near intersection design capacity, resulting in major delays for vehicles crossing the intersection (40 to 60 seconds), and LOS F, representing jammed

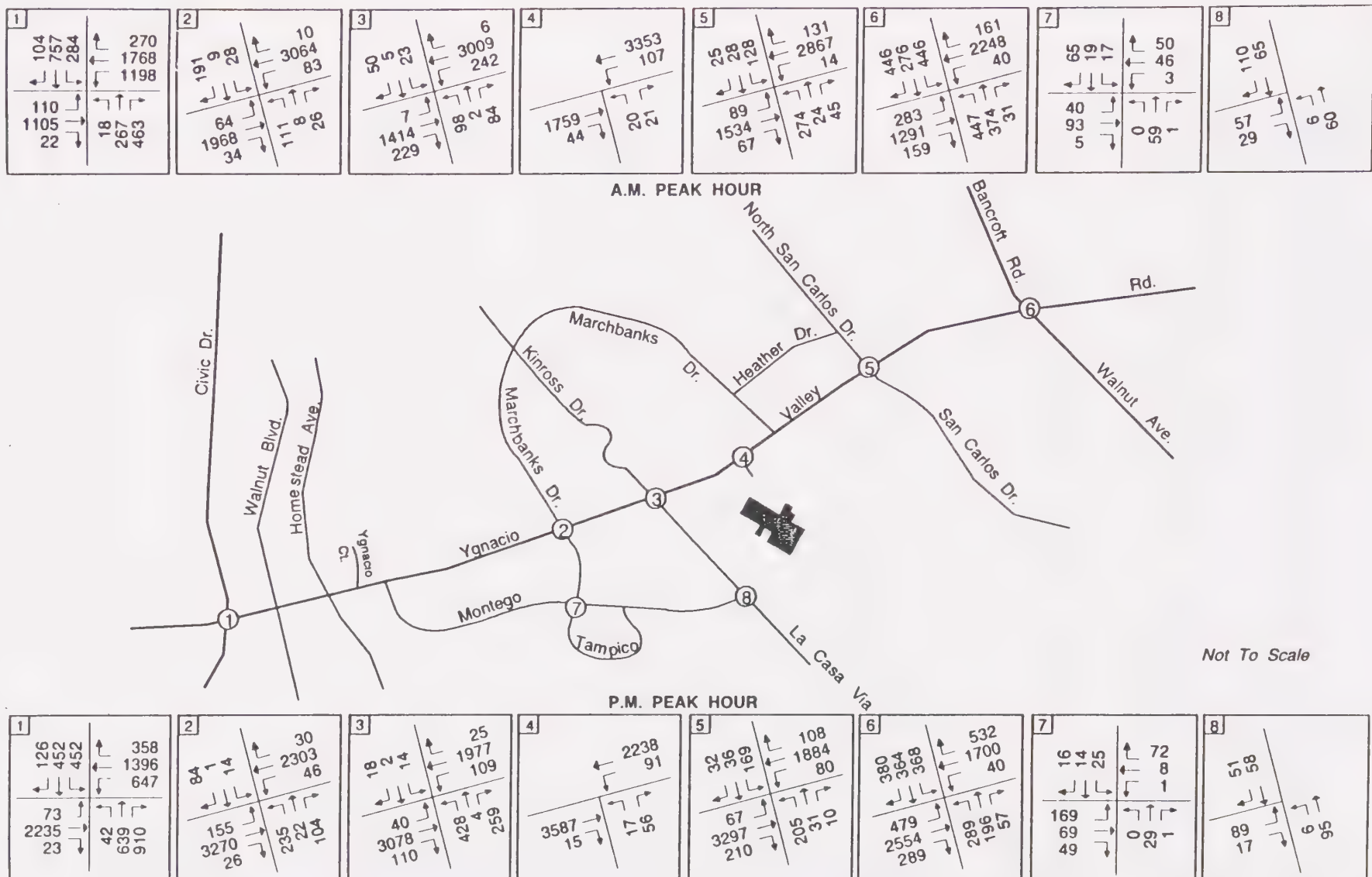


Figure 29  
**EXISTING AM AND PM  
PEAK HOUR VOLUMES**

SOURCE: Omni Means, Ltd.

conditions where traffic flows exceed design capacity, resulting in long queues backing up on all intersection approaches and delays in excess of 60 seconds. Table 9 lists the definitions of LOS scales used by the city and used in this EIR analysis.

At **signalized** intersections, LOS is determined by calculating the volume of conflicting turning movements at an intersection during a one-hour period and dividing that total by the design capacity to accommodate turning movements. The resulting calculation yields a *volume/capacity (v/c) ratio*.

At **unsignalized** intersections where the minor street is controlled by stop signs, the LOS reflects delays experienced by that minor street traffic. Thus, while an intersection's overall LOS may be C or better, a specific turning movement may experience delay equivalent to LOS E or F.

Intersection LOS computations have been made in this EIR analysis following standard city of Walnut Creek practice. For signalized intersections, peak hour LOS has been calculated in this EIR analysis using the Contra Costa Transportation Authority (CCTA) methodology, following standard city practice. This methodology uses a variation of the Transportation Research Board's (TRB) "Circular 212 Planning Method." For unsignalized intersections where the minor street is stop-sign controlled (i.e., a two-way stop sign), the LOS computation methodology described in the TRB's 1985 Highway Capacity Manual, Special Report 209<sup>1</sup> has been utilized.

For unsignalized intersections that are all-way-stop-sign controlled, the TRB's Circular 373 method has been utilized.<sup>2</sup> This method uses "average stopped delay" (ASD) data as the basis for determining intersection LOS. Should one or more of the all-way-stop intersection approach legs be substantially unbalanced (i.e., higher volume), vehicle delays for that approach would be proportionately higher.

(3) Existing Intersection Traffic Volumes. Both AM (7:00-9:00) and PM (4:00-6:00) peak period turning movement counts were either obtained from the city of Walnut Creek or conducted by the EIR authors at the eight study intersections.<sup>3</sup> From these counts, existing peak hour intersection turning movements have been diagrammed and are shown on Figure 29.

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<sup>1</sup>Transportation Research Board, 1985 Highway Capacity Manual: Special Report 209, Unsignalized Intersections, Third Edition, Updated 1994.

<sup>2</sup>TRB, Circular 373--All-Way-Stop-Controlled Intersections, September, 1990.

<sup>3</sup>AM and PM peak period intersection counts conducted by the city of Walnut Creek in March 1994, and May and June 1995.



Table 8  
INTERSECTION LEVEL OF SERVICE DEFINITIONS

<u>Level of Service</u>	<u>Signalized Intersections</u>	<u>Unsignalized Intersections<sup>1</sup></u>
A	Uncongested operations, all queues clear in a single-signal cycle. (Average stopped delay less than five seconds per vehicle; v/c less than 0.60.)	Little or no delay.
B	Uncongested operations, all queues clear in a single cycle. (Average delay of 5015 seconds; v/c = 0.60-0.69.)	Short traffic delays.
C	Light congestion, occasional backups on critical approaches. (Average delay of 15-25 seconds; v/c = 0.70-0.79.)	Average traffic delay.
D	Significant congestion of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. (Average delay of 25-40 seconds; v/c = 0.80-0.89.)	Long traffic delays for some approaches.
E	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). (Average delay of 40-60 seconds; v/c = 0.90-0.99.)	Very long traffic delays for some approaches.
F	Total breakdown, stop-and-go operation. (Average delay in excess of 60 seconds; v/c of 1.00 or greater.)	Extreme traffic delays for some approaches (intersection may be blocked by external causes).

SOURCE: Transportation Research Board, Highway Capacity Manual (Special Report 209), 1985.

<sup>1</sup> Level of Service refers to delays encountered by certain stop sign controlled approaches. Other approaches may operate with little delay.

(4) Existing Intersection Level of Service. As shown in Table 11 later in this section, all five principal intersections on Ygnacio Valley Road currently operate at LOS D (e.g., significant congestion) or worse during the PM peak hour, and three of the five principal Ygnacio Valley Road intersections currently operate at LOS D or worse during the AM peak hour. Only the Ygnacio Valley Road/La Casa Via and Ygnacio Valley Road/Tampico intersections operate better than LOS D during the AM peak period. The John Muir "north" driveway/Ygnacio Valley intersection, which is not a principal Ygnacio Valley Road intersection, operates at LOS B during the AM peak hour and LOS C during the PM peak hour, respectively.

The existing traffic congestion at these Ygnacio Valley Road intersections is due primarily to heavy eastbound and westbound through traffic. In contrast to the Ygnacio Valley Road intersections, the two unsignalized project study intersections along Montego at Tampico and La Casa Via both operate at LOS A during both the AM and PM peak hour.

### **c. Arterials**

(1) Study Arterial Segment. In addition to intersection operation, traffic flow conditions along the principal arterial roadway segments in an area are another principal measure of local roadway system operation. The Ygnacio Valley Road arterial segment between Bancroft Road-Walnut Avenue and Civic Drive is directly affected by traffic from John Muir Medical Center and has been included as the principal "study arterial" in this EIR analysis.

(2) Arterial Level of Service Concept. The major difference between the analysis of a signalized intersection and that of an arterial is the treatment of turning vehicles. Whereas the purpose of a signalized intersection is to move vehicles past a specific point, the purpose of an arterial is to provide through-access along a roadway segment. Arterial level-of-service (LOS) is typically measured based on the average through-vehicle travel speed for the specific segment. It is strongly influenced by the number of signals per mile and the average intersection delay. Factors such as inappropriate signal timing and congested intersection traffic flow can substantially degrade arterial LOS.<sup>1</sup>

The methodology used by the CCTA and the city, and the method used in this EIR analysis, to determine arterial LOS is based on the TRB's 1985 Highway Capacity Manual for Urban and Suburban Arterials (Chapter 11).<sup>2</sup> In addition, the TRB's *Comprehensive Analysis Program for Single Signalized Intersections* (CAPSSI) computer software was used to provide data input for the arterial analysis. CAPSSI software utilizes delay methodology in

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<sup>1</sup>Transportation Research Board, 1985 Highway Capacity Manual, Third Edition, Updated 1994. Although "poor progression" of traffic through signalized intersections can also degrade arterial LOS, this is not a significant problem on Ygnacio Valley Road due to systemwide signalization timing improvements which have enhanced traffic progression.

<sup>2</sup>Transportation Research Board (TRB), 1985 Highway Capacity Manual: Special Report 209, Urban and Suburban Arterials, Chapter 11, Third Edition, Updated 1994.

Table 9  
ARTERIAL ROADWAY LEVEL OF SERVICE DEFINITIONS

<u>Level of Service</u>	<u>Roadway Condition</u>
A	Primarily free-flow operations at average travel speeds usually about 90 percent of the free flow speed for the street. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.
B	Reasonably unimpeded operations at average travel speeds usually about 70 percent of the free-flow speed for the street. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome.
C	Stable operations. However, ability to maneuver and change lanes in midblock locations may be more restricted than in LOS B, and longer queues and/or adverse signal coordination may contribute to lower average travel speeds of about 50 percent of the average free-flow speed for the street.
D	Small increases in flow may cause substantial increases in approach delay and, hence, decreases in arterial speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or a combination of these factors. Average travel speeds are about 40 percent of free-flow speed.
E	Significant approach delays and average travel speeds of one-third the free flow speed or lower. Such operations are caused by some combination of adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing.
F	Arterial flow at extremely low speeds below one-third to one-quarter of the free-flow speed. Intersection congestion is likely at critical signalized locations, with high approach delays resulting. Adverse progression is frequently a contributor to this condition.

SOURCE: Transportation Research Board, Highway Capacity Manual, (Special Report 209), 1985.



Table 10

EXISTING LEVEL OF SERVICE AND AVERAGE TRAVEL SPEEDS ON YGNACIO VALLEY ROAD<sup>1</sup>

<u>Direction/Peak Hour</u>	<u>Arterial LOS</u>	<u>Avg.Travel Speed</u>
Westbound/AM Peak	F	11.2 mph
Eastbound/PM Peak	E	14.0 mph

SOURCE: Omni-Means, Ltd.

<sup>1</sup> Arterial LOS and average travel speeds reflect the Ygnacio Valley Roadway segment between the Bancroft-Walnut and Civic intersections, respectively; LOS calculated using the Transportation Research Board, Highway Capacity Manual: Special Report 209, Urban and Suburban Arterials, Chapter 11, Third Edition, Updated 1994.

accordance with the 1985 Highway Capacity Manual to yield an operational LOS for each intersection. The LOS computation is expressed in overall vehicle delay in seconds and is determined based on input provided by city transportation staff regarding intersection cycle lengths, signal phasing, and pedestrian split times.<sup>1</sup>

Arterial roadway level of service (LOS) definitions are described in Table 9. Like intersection LOS data, arterial roadway LOS is expressed with a rating of A through F, with A representing optimal conditions and F representing highly congested conditions. Average travel speed is the primary indicator of arterial roadway LOS. An arterial roadway LOS A equates to an average travel speed equal to 90-100 percent of the free-flow travel speed, whereas an arterial roadway LOS F equates to an average travel speed of 33 to 25 percent of the free-flow travel speed.

(4) Existing Roadway LOS. Existing arterial LOS and average travel speed on Ygnacio Valley Road were calculated for the critical westbound commute direction during the AM peak hour and the critical eastbound commute direction during the PM peak hour. As shown in Table 10, during the AM peak hour the overall arterial LOS is currently F, with an average travel speed of 11.2 miles per hour in the westbound commute direction on Ygnacio Valley Road between Bancroft and Civic. During the PM peak hour, the arterial LOS is currently E, with an average travel speed of 14.0 miles per hour in the eastbound commute direction on Ygnacio Valley Road between Civic and Bancroft. Field observations indicate that during both the AM and PM hour, the peak commute direction along Ygnacio Valley Road experiences about 15-30 minutes of very slow traffic progression. Vehicles often have the green light but cannot progress through the intersection due to heavy congestion.

#### **d. Existing John Muir Medical Center Access Pattern and Distribution**

(1) Access Drives. Direct access to the JMMC Main Campus Site from Ygnacio Valley Road is currently provided by the signalized "north" driveway connection at the northwestern corner of the site. Access to the Main Campus Site is also provided by the unsignalized "south" driveway on La Casa Via located about 650 feet southeast of the signalized Ygnacio Valley/La Casa Via intersection.

Secondary access to/from the Main Campus "south" driveway on La Casa Via is available via the Montego and Tampico connections with Ygnacio Valley Road. Montego, which intersects La Casa Via about 250 feet southeast of the "south" driveway, provides partial access (right-turns only) at Ygnacio Valley and full access via the signalized Ygnacio Valley/Tampico intersection.

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<sup>1</sup>Simin Timuri, Assistant Engineer, City of Walnut Creek, Personal communication on November 28, 1995.

(2) Trip Distribution. Based on current AM and PM peak period traffic counts, the current access pattern for all roadway trips to and from JMMC is as follows:

- 44 percent to/from Ygnacio Valley Road via the Main Campus Site signalized driveway intersection ("north" driveway) on Ygnacio Valley Road;
- 48 percent to/from Ygnacio Valley Road via the La Casa Via "south" driveway and the Ygnacio Valley/La Casa Via intersection;
- 8 percent to/from Ygnacio Valley Road via the La Casa Via "south" driveway, connecting to Montego and Tampico.

As these distributions suggest, most JMMC traffic (92 percent) gains access to Ygnacio Valley Road via the most direct street connections. A small portion of the JMMC traffic (eight percent) uses the Montego and Tampico connection streets to/from Ygnacio Valley Road. Because Montego is limited to right-turns only at Ygnacio Valley Road, JMMC trips on Montego consist primarily of inbound traffic from the west. Outbound JMMC traffic on Montego must exit via the signalized Ygnacio Valley/Tampico intersection.

(3) Residential and Medical Center Traffic on La Casa Via. Southeast of the JMMC campus, La Casa Via extends into the La Casa Via single family residential neighborhood. Because La Casa Via is the only access route available for the neighborhood, residential traffic must interact with medical center traffic and the inherent congestion, turning movements, curb parking maneuvers, deliveries etc., which can disrupt smooth traffic flow in and out of, and detract from the overall image of, the residential neighborhood.

#### **e. Future Base (Year 2010) Conditions**

(1) Methodology. The term "future base conditions" refers in this analysis to a projection of future traffic conditions on the local roadway system *without the proposed project*. For the purposes of this study, future baseline traffic conditions for the year 2010 were established



using the Central/CMP travel demand model for Central Contra Costa County.<sup>1</sup> This traffic model reflects projected overall cumulative growth in Walnut Creek and the surrounding region. The results are illustrated in Figure 30.

(2) Planned Roadway Improvements. The Central/CMP travel demand model assumes certain planned regional roadway improvements will be completed by the year 2010, including improvements to State Route 4, the completion of the I-680/State Route 24 interchange, and a BART extension to West Pittsburg, which may affect trip distribution and traffic volume levels on Ygnacio Valley Road. In addition, a minor local roadway improvement is assumed for the Ygnacio Valley/Walnut-Bancroft intersection that would result in a new, separate westbound right-turn lane on Ygnacio Valley Road for motorists wishing to travel north on Bancroft Road. No other circulation improvements for project study intersections are planned at this time.

(3) Future Base Traffic Volumes. As shown by comparing the traffic volumes on Figure 29 with those on Figure 30, the future base modelling results indicate that westbound AM peak hour volumes on the study segment of Ygnacio Valley Road would remain about the same, whereas AM peak hour eastbound volumes would increase by approximately 98 trips, approximately a 7 percent average increase along the study segment between Civic and Bancroft. During the PM peak hour, westbound through-volumes would increase by about 165 vehicles, representing roughly a 9 percent average increase along the study segment. Traffic volumes in the eastbound direction would increase by approximately 240 vehicles, representing roughly an 8 percent average increase.

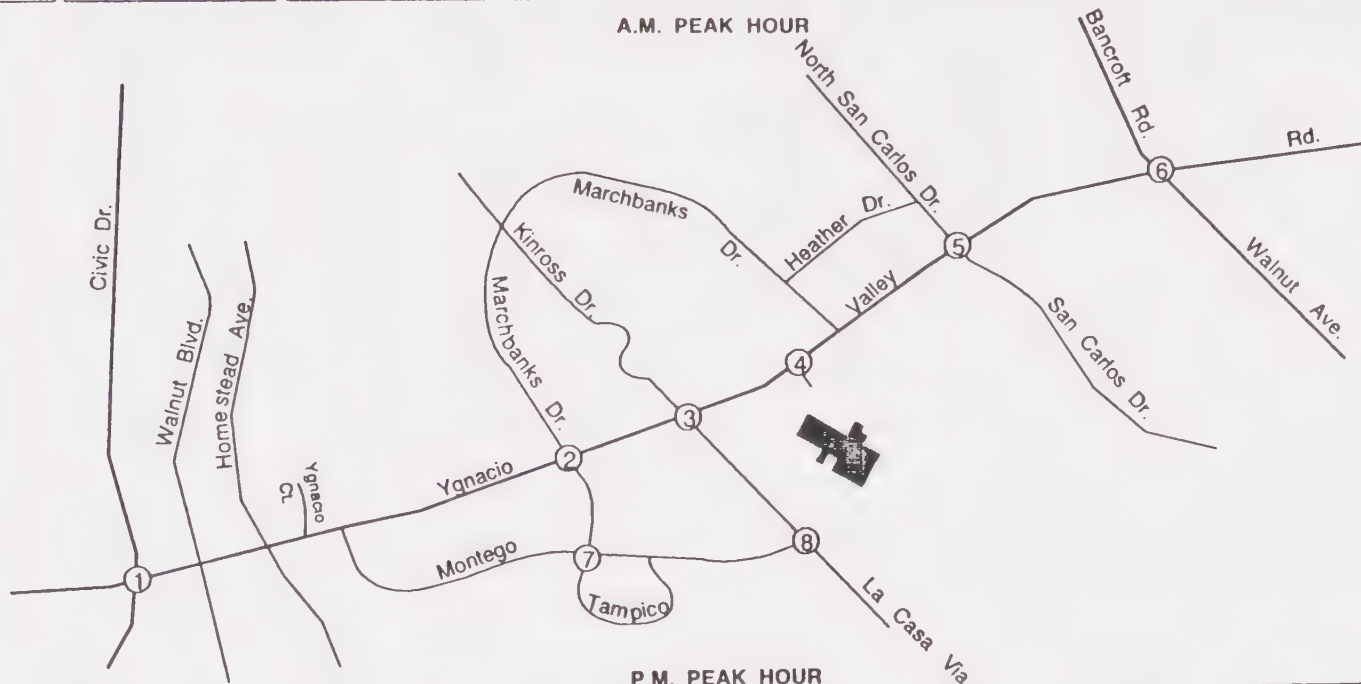
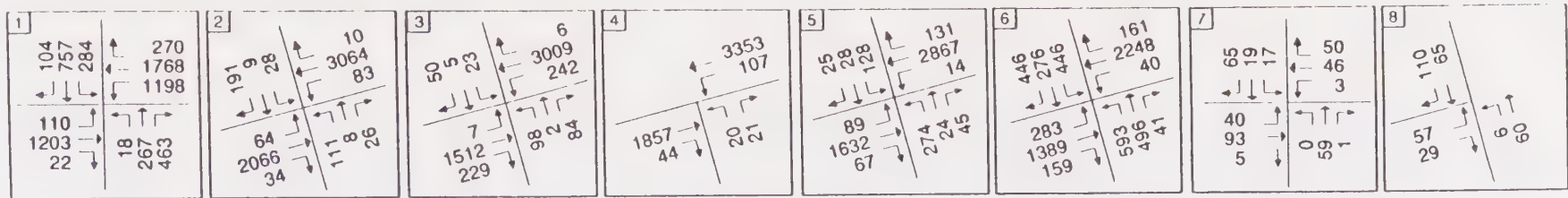
These projected light to moderate 15-year increases in peak hour through-volumes along Ygnacio Valley Road in the project vicinity are attributable to the following factors that are expected to limit traffic growth:

- existing AM and PM peak hour through-volumes along Ygnacio Valley Road are already at capacity;

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<sup>1</sup>Luba C. Wyznyckyj, Korve Engineering, personal communication; EMME2 plot of Ygnacio Valley Road for year 2010 AM & PM peak hour, November 21, 1995. The base year of 2010 (15 years) reflects best available future traffic forecast data. However, the John Muir Master Plan analyzed in the "Impact" subsection of this chapter is a 20-year plan, i.e., the Master Plan anticipates buildout in the year 2016 if it is approved in 1996. The 2010 horizon year was chosen for this base case cumulative traffic analysis after consultation with City staff because only year 2010 volumes are available from the Central/CMP demand model for Central Contra Costa County. As a result, the impact analysis later in this chapter conservatively assumes project buildout by the year 2010. (John Hall, Transportation Administrator, City of Walnut Creek, meeting on November 29, 1995.)

Specifically, future base volumes for the year 2010 were compared to calibrated model volumes for the base year 1990 (DKS Associates, Central/CMP Travel Demand Model Final Report Volume II: Network and Volume Plots, May 23, 1993.) After adjusting for growth which occurred between 1990 and 1995, the increases in AM and PM peak hour volumes between the year 1995 to 2010 were then applied to existing peak hour intersection through-volumes on Ygnacio Valley Road.



Not To Scale

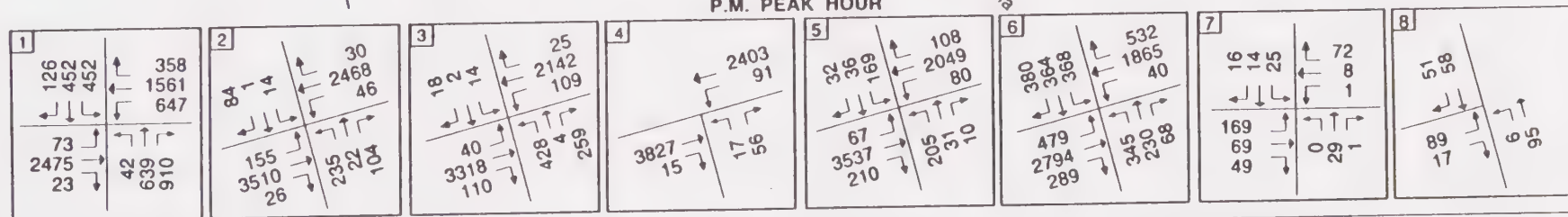


Figure 30  
FUTURE BASE (YEAR 2010) AM AND PM PEAK  
HOUR VOLUMES WITHOUT PROJECT

SOURCE: Omni Means, Ltd.

- the Highway 4 improvements will attract some regional trips that now use the Kirker Pass-Ygnacio Valley Road corridor; and
- completion of the I-680/SR 24 interchange improvements will encourage some Walnut Creek and Concord bound trips to stay on I-680.

While the above factors tend to support limited (slight-to-moderate) growth in peak hour volumes along Ygnacio Valley Road, average daily traffic (ADT) volumes along the corridor are expected to grow at a faster rate, from the existing ADT volume of 71,000 vehicles to a projected ADT of 77,3000 vehicles by the year 2010 (i.e., a nine percent increase). One effect of this increased overall traffic volume would be expanded duration AM and PM peak periods along Ygnacio Valley Road.

(4) Future Base Intersection Levels of Service. Table 11 lists projected year 2010 LOS figures for the eight study intersections based on the above future base traffic volume forecasts. Three intersections along Ygnacio Valley Road are anticipated to experience a change in LOS rating, as follows: (a) the intersection of Ygnacio Valley/Civic is anticipated to change from LOS D (0.90) to LOS E (0.92) during the AM peak hour; (b) the Ygnacio Valley/La Casa Via intersection is anticipated to change from LOS D (0.87) to E (0.92) during the PM peak hour; and (c) the Ygnacio Valley/Walnut-Bancroft intersection is anticipated to change from LOS D (0.86) to E (0.91) during the PM peak hour.

All remaining project study intersection LOS ratings are anticipated to remain unchanged from existing conditions.

#### **f. Existing Parking Facilities**

(1) Existing Parking Layout. The location and capacity of existing offstreet parking in the JMMC vicinity is illustrated on Figure 31 and listed in Table 12. As shown, primary offstreet parking for the John Muir Medical Center is provided at the Main Campus surface parking lot located between La Casa Via and the medical center building complex. This main parking area includes signage for hospital services (emergency, trauma center, birthing center, main lobby, and Sierra Surgi-center) to provide motorists a path to the most convenient parking areas.

In addition, other smaller, secondary JMMC-assigned parking lots are located on the north and east sides of the Main Campus Site. All of these lots are interconnected and can be accessed from either the La Casa Via or Ygnacio Valley Road driveway by connecting internal drives. The various parking lots are clearly marked for outpatient, visitor, and staff parking. The northwestern parking lot (located at the rear of the Main Campus) has been designated for staff and physicians only.



Table 11  
EXISTING AND FUTURE BASE STUDY INTERSECTION LEVEL OF SERVICE FOR AM  
AND PM PEAK HOUR PERIODS

<u>Intersection</u>	<u>Existing</u>				<u>Future Baseline</u>			
	<u>AM</u>	<u>V/C</u>	<u>PM</u>	<u>V/C</u>	<u>AM</u>	<u>V/C</u>	<u>PM</u>	<u>V/C</u>
	<u>LOS</u>	<u>Ratio</u>	<u>LOS</u>	<u>Ratio</u>	<u>LOS</u>	<u>Ratio</u>	<u>LOS</u>	<u>Ratio</u>
<i>Signalized</i> <sup>1</sup>								
Ygnacio Valley/Civic	D	0.90	F	1.02	E	0.92	F	1.06
Ygnacio Valley/Marchbanks-Tampico	C	0.80	D	0.85	C	0.80	D	0.89
Ygnacio Valley/La Casa Via	B	0.69	D	0.87	B	0.69	E	0.92
Ygnacio Valley/John Muir Medical Center	B	0.66	C	0.76	B	0.66	C	0.80
Ygnacio Valley/San Carlos	D	0.86	E	0.92	D	0.86	E	0.97
Ygnacio Valley/Walnut-Bancroft	D	0.90	D	0.86	D	0.90	E	0.91
<i>Unsignalized</i> <sup>2</sup>								
Montego/Tampico	A	1.9	A	2.6	A	1.9	A	2.6
Montego/La Casa Via	A	N/A	A	N/A	A	N/A	A	N/A

SOURCE: Omni-Means, Ltd.

<sup>1</sup> Signalized intersection LOS based on CCTA methodology.

<sup>2</sup> LOS for an all-way-stop controlled intersection reflects vehicle delay in seconds. LOS for unsignalized intersection refers to the minor street (stop-sign controlled) turning movement because a v/c ratio cannot be calculated for an unsignalized intersection.

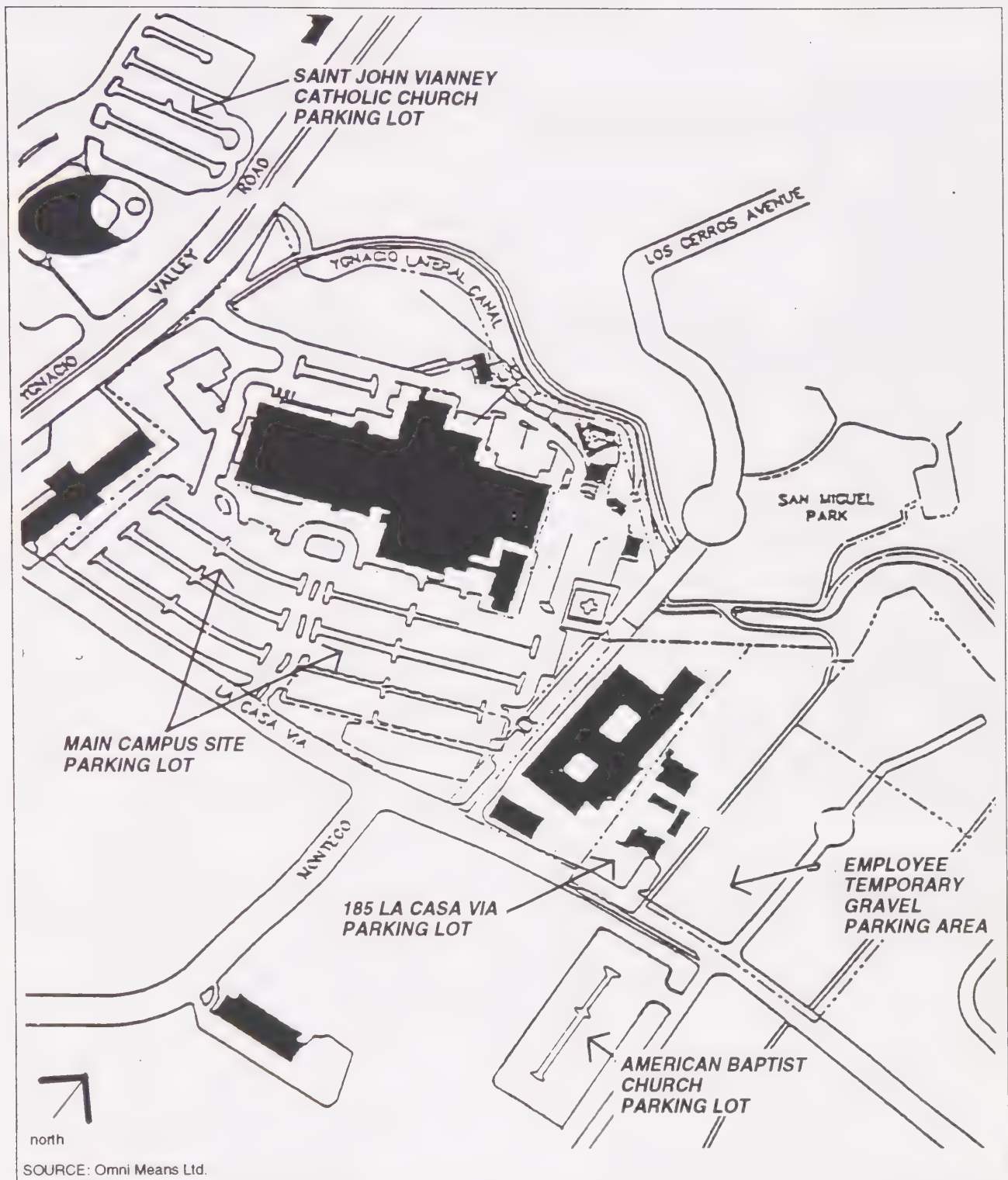


Figure 31  
**PARKING LOTS UTILIZED FOR  
 EXISTING MEDICAL CENTER**

Table 12  
SUMMARY OF JMMC PARKING FACILITIES

<u>Parking Location</u>	<u>Primary User</u>	<u>Available Spaces</u>	<u>Peak Demand</u>	<u>Proportion of Available Spaces Utilized Under Peak Demand Conditions</u>
<u>Onsite Parking:</u>				
Main Campus	Physicians and staff	556	539	97%
	Visitors and patients	343	318	93%
La Casa Court Site (185 La Casa Via)	Staff and patients	11	6	55%
La Casa Court Site (Overflow gravel lot)	Staff	<u>100</u>	<u>2</u>	<u>2%</u>
<i>Subtotal for Onsite Parking</i>		1,010	865	86%
<u>Offsite Parking</u>				
St. John Vianney Catholic Church	Staff	82	19	23%
American Baptist Church	Staff	<u>55</u>	<u>2</u>	<u>4%</u>
<i>Subtotal for Offsite Parking</i>		137	21	17%
<b>Total Parking</b>		<b>1,147</b>	<b>886</b>	<b>77%</b>

SOURCE: Fehr & Peers Associates, 1995 Parking Survey



(2) Existing Parking Demand. As required by a condition of approval for the Phase III building, parking conditions at JMMC have been periodically monitored and documented; a total of eight such parking surveys have been conducted by the JMMC over the 1990-1995 period. The existing parking conditions described in this EIR section are based on the most recent February 1995 JMMC survey.<sup>1</sup> The Phase III conditions of approval also stipulate that if a parking shortage is identified through these surveys, a new 400-space parking structure must be constructed.

As indicated in Table 12, most existing JMMC parking is provided by the Main Campus parking lot, which is assigned for use by physicians, other hospital staff, visitors, and patients. Four off-site lots are also available for employees. Of the 1,147 total available offstreet spaces, 899 are located in the Main Campus lot, and 248 are located at other surrounding lots, including the La Casa Court Site.

Table 12 summarizes the types of parking spaces currently available and the peak demand for those spaces. The latest surveys indicate that peak parking demands occur at 11:00 AM (77 percent); demand is only slightly lower at 2:00 PM (75 percent). The 886-space peak demand total equates to a current peak parking demand rate of 2.43 spaces per 1,000 square feet of medical center floor area.<sup>2</sup>

(3) Onsite Parking Usage. The main, on-campus parking is utilized by both visitors and staff, resulting in a high, 95 percent overall occupancy during the peak demand period. Because it is desirable to have 10 to 15 percent of these parking spaces available for incoming staff and visitors, the "practical capacity" of the JMMC main parking lot is 85 to 90 percent occupancy. Table 12 indicates that this practical capacity level has been reached and on-campus parking is essentially saturated.

(4) Offsite Parking Usage. At the time an independent parking survey was conducted for this EIR, two of the three offsite parking lots assigned for JMMC staff were not being used. Parking spaces at the American Baptist Church lot (55 spaces) and the overflow gravel lot (100 spaces) are about 800 to 1,000 feet from the Main Campus Site and JMMC staff use is apparently discouraged by this walking distance. Assigned staff parking at the St. John

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<sup>1</sup>Fehr & Peers Associates, *Annual Parking Survey - John Muir Medical Center - Walnut Creek, CA*, February 1995.

<sup>2</sup>This peak parking demand reflects offstreet parking only. No study has been conducted to determine the usage of onstreet parking by JMMC staff, patients and visitors. However, because the total number of onstreet parking spaces in close proximity to the Main Campus site is relatively low compared to the total number of offstreet parking spaces (i.e., approximately 25-to-30 onstreet spaces vs 1,147 offstreet spaces), and because the limited number of onstreet spaces are shared with other uses in the area (i.e., the Shell Ridge medical office buildings, Walnut Creek Hospital, etc.), it is not believed that the JMMC peak parking demand of 2.43 spaces per 1,000 square feet would be significantly different if onstreet parking were factored into the equation.

Vianney Catholic Church parking lot experiences more use, but observed usage represented a small percentage of the 82 spaces available, even though JMMC provides a frequent shuttle van service between this lot and the Main Campus Site.

The JMMC administration has recognized that on-campus parking conditions would be measurably relieved if staff made better use of the offsite parking options at St. John Vianney Catholic Church and American Baptist Church. (The gravel lot at the La Casa Court site is intended only to serve occasional overflow parking demand.) In January 1996, JMMC initiated a new program requiring the use of the church parking and La Casa Court parking by employees.<sup>1</sup>

(5) Onstreet Parking. In addition to the offstreet parking facilities listed in Table 12, onstreet (curbside) parking is available along La Casa Via and Montego Road. In the project vicinity, there are about 25 to 30 parallel spaces that are believed to be primarily used by medical staff located in the office buildings on the west side of La Casa Via, although usage of these spaces is also shared by JMMC, Walnut Creek Hospital, and other uses in the vicinity.

#### g. Existing Local Transit Service

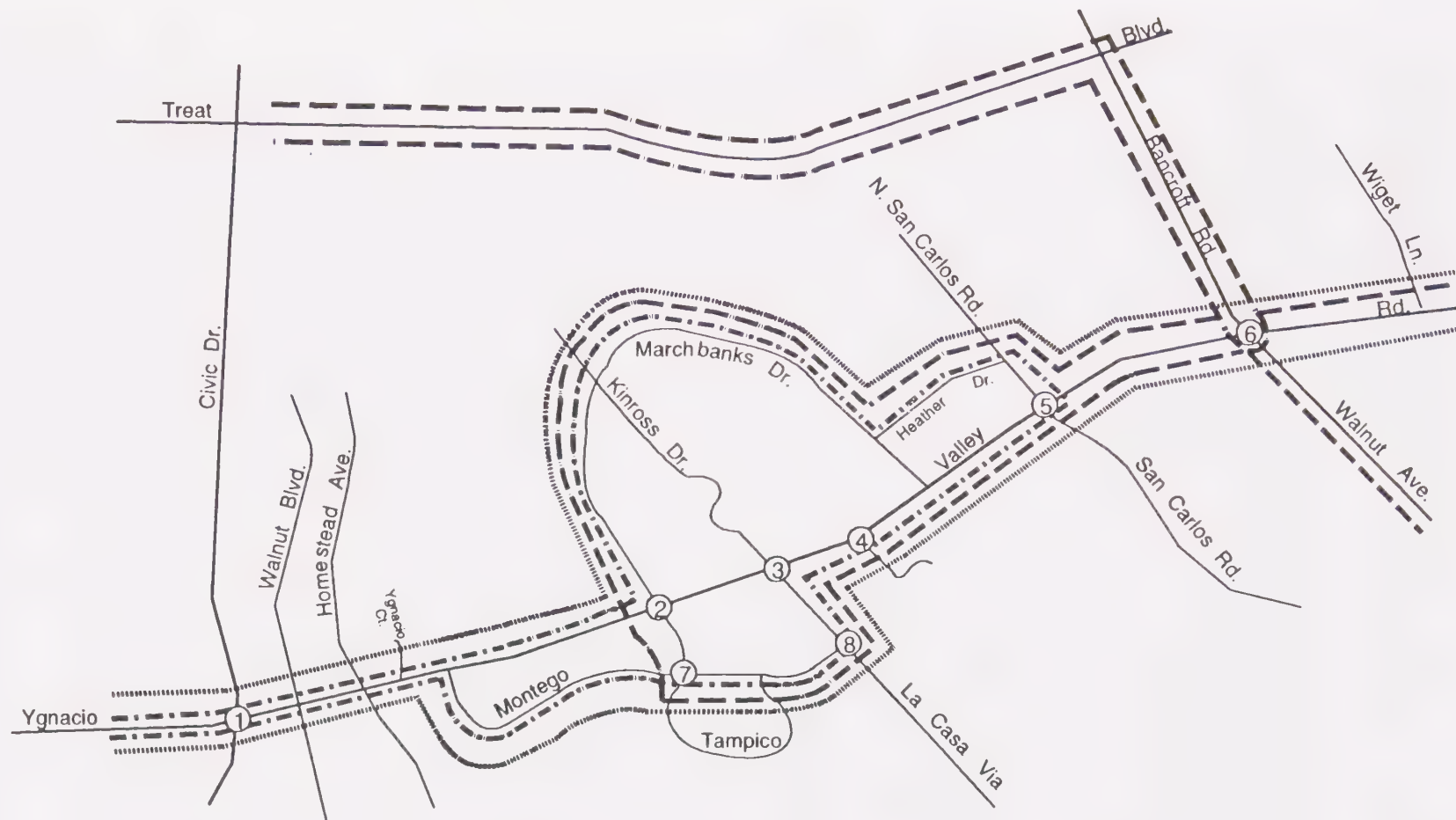
(1) Bus Transit System. Local bus service in the project area is currently provided by the Central Contra Costa County Transit Authority (CCTA or "County Connection"). Local CCTA bus routes are shown on Figure 32. In the immediate project vicinity, bus stops are located on the south side of Montego at La Casa Via and on the JMMC Main Campus Site at the main lobby entrance. Buses access the Main Campus Site via the La Casa Via "south" driveway, travel northeast and turn around at the main hospital entrance before exiting via the same driveway. The following local bus routes have been serving the area since September 1995:

*CCTA Route 101.* This bus route serves Rossmoor, Ygnacio Valley Road, and JMMC Monday through Friday and on Saturdays. During the peak weekday service hours, headways range between 10 and 20 minutes depending on the location of the stop. Starting at the Rossmoor Shopping Center, the general route taken includes Rolling Hills Drive, Tice Valley Boulevard, Boulevard Way, Oakland Avenue, Ygnacio Valley Road, Montego, La Casa Via, San Carlos Drive, and Marchbanks Drive.

*CCTA Route 107.* This bus route connects the JMMC area with the Pleasant Hill BART station, Mitchell Drive park-and-ride lot, and JMMC Monday through Friday and on Saturdays. During weekday peak commute hours, headways range between 10 and 20 minutes depending on the location of the bus stop. Starting at the Pleasant Hill BART station, Route 107 includes Treat Boulevard, Bancroft Road, Walnut Avenue, Oak Grove Road, Mitchell

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<sup>1</sup>Allan C. Moore, Gagen, McCoy, McMahon, and Armstrong, Letter to Sandra Meyer, City of Walnut Creek, November 21, 1995.



#### LEGEND

C.T.T.A. Bus Route 101  
 C.T.T.A. Bus Route 107  
 C.T.T.A. Bus Route 930



SOURCE: Omni Means, Ltd.

Figure 32  
**VICINITY TRANSIT  
 ROUTES**



Drive, N. Wiget Lane, Ygnacio Valley Road, La Casa Via, Montego, Tampico, and Marchbanks Drive.

*CCTA Route 930.* This route connects the Walnut Creek BART station with Antioch. The line serves the Antioch/Hillcrest park-and-ride lot, Mitchell Drive Park and Ride Lot, and Walnut Creek BART station Monday through Friday only. Headways are every 20 minutes during the weekday peak commute hours. Starting at the Walnut Creek BART station, line 930 travels on Ygnacio Valley Road via Montego, La Casa Via, Marchbanks Drive, N. Wiget Lane, Mitchell Drive, and Oak Grove Road. Once back on Ygnacio Valley Road, line 930 travels east out Kirker Pass Road, Buchanan, Sommersville Road, Fairview, Delta Fair, Highway 4, and Hillcrest Avenue.

(2) BART System. The nearest Bay Area Rapid Transit (BART) stations are located in downtown Walnut Creek and Pleasant Hill. The Walnut Creek BART station is located about 1.8 mile to the southwest via Ygnacio Valley Road. The station is located at the Ygnacio Valley Road intersection with Oakland Boulevard and California Street. The Pleasant Hill BART station is located about 2.3 miles to the northwest via Ygnacio Valley (northeast), Bancroft Road (northwest), and Treat Boulevard (west). As noted in section 1.c above, CTA bus routes 107 and 930 provide connections between the JMMC Main Campus Site and these two BART stations.

#### h. Existing Bicycle and Pedestrian Facilities

(1) Existing Bikeways. The City of Walnut Creek provides bikeways in three different standard classifications. A *Class 1* bikeway is a bike path or bike trail constructed on a separate right-of-way, completely separated from roadways. A *Class 2* bikeway is a striped bike lane--i.e., a restricted segment of the roadway right-of-way for the exclusive use of bicycles, although vehicle parking and cross-flows of pedestrians/motorists are permitted. A *Class 3* bikeway is a local roadway which is designated by signs or other markings as a bike route, but is shared with motorists and pedestrians (i.e., has no striped bike lane).

Based on the *Transportation Element* of the city's general plan, there are several Class 2 (striped lanes on roads) and Class 1 offstreet bike routes in the project study area. Specifically, Ygnacio Valley Road has been designated as a Class 1 bikeway, although currently no off-street bicycle lane exists in the vicinity of the project. Due to heavy through-traffic, narrow travel lanes, and associated safety concerns, the city has installed signage to encourage bicyclists to use the sidewalks along Ygnacio Valley Road as an alternative to the roadway. The Ygnacio Canal Trail is a Class 1 bikeway south of Ygnacio Valley Road and a combination Class 1 and Class 2 bikeway north of Ygnacio Valley Road. This bikeway is accessible to equestrians and pedestrians, connects to Heather Farms, abuts the JMMC Main Campus Site, and provides east-west access to other bikeway trails throughout the city.

In the immediate study area, Class 2 bikeways are also located along portions of San Carlos Drive, Marchbanks Drive, and Walnut Avenue.

(2) Proposed Bikeways. Additional bikeways are proposed for portions of La Casa Via, Montego, Marchbanks Drive, Homestead Avenue, and Walnut Boulevard. The *Transportation Element* of the city's general plan also includes a policy to "install improvements at signalized intersections for bicyclists along designated bicycle routes in areas of high bicycle usage. The improvements may include loop detectors for bicyclists or push buttons placed conveniently for bicyclists." For the Ygnacio Valley Road corridor, the city is planning to develop a new bikeway facility between I-680 and Oak Grove Road.<sup>1</sup> The City also has a funded Capital Improvement Project for the fiscal year 1996 to provide a bike path connection between Montego and the Ygnacio Canal Trail. This path would allow bikers and pedestrians an alternative route to Ygnacio Valley Road.

(2) Existing Pedestrian Facilities. Pedestrian sidewalks are located along both sides of most of the arterial and collector streets in the immediate project vicinity. This includes Ygnacio Valley Road, La Casa Via, and Montego. Pedestrian crosswalks are located at the Ygnacio Valley intersections with La Casa Via and the John Muir driveway, as well as at the La Casa Via/Montego intersection. The existing Ygnacio Canal and Briones/Mt. Diablo Trails are easily accessed from the Main Campus Site.

Within the JMMC Main Campus Site, a series of pedestrian sidewalks and crosswalks connect the surface lot parking areas with the medical center facilities, including the main hospital lobby, emergency and trauma centers, birthing center, and Sierra Surgi-Center.

Field observations indicate that pedestrian activity in the vicinity of the Main Campus Site currently is relatively light. The predominant direction of foot traffic is between the medical center parking lot and the medical center buildings. Physicians and/or medical assistants have also been observed crossing La Casa Via between the Shell Ridge medical offices on the southeast side of La Casa Via and JMMC on the northwest. Many of these pedestrians tend to jay-walk across La Casa Via; there is no mid-block crosswalk.

#### i. Existing JMMC Service Vehicle/Emergency Access

(1) Service Vehicles. Loading facilities for JMMC receiving and shipping are located near the northeast corner of the Main Campus Site. A service drive at the rear of the medical center connects these loading facilities directly to the JMMC "north" driveway off Ygnacio Valley Road. Trucks travel in a southeasterly direction to the loading area and are required by JMMC to exit out the same route.

(2) Emergency Vehicles and Helicopters. JMMC is the designated trauma center for Contra Costa County. The emergency medical treatment facilities for the medical center are located at the northeast portion of the complex where they are accessed by ambulance and

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<sup>1</sup>City of Walnut Creek, *General Plan, Transportation Element*, Chapter 4, Table 4-4, page 4-41, July 27, 1993.

helicopters. Ambulances travelling to and from the medical center use Ygnacio Valley Road and La Casa Via to reach the main JMMC parking lot entrance--i.e., the "south driveway." Ambulances then travel east down the internal drive and turn right into the emergency facilities.

A helipad is located near the northeast corner of the project site and is primarily used for the transport of emergency trauma patients to and from the center. The emergency helicopters approach the hospital in a designated northeasterly direction over the JMMC Main Campus parking lot to land on the helipad. In leaving the helipad, the helicopters fly in a designated southwesterly direction. These flight paths are officially designated by the California Department of Transportation, Division of Aeronautics. The designated approach and departure zones were recently adjusted to reduce noise impacts on the La Casa Via and other Walnut Creek residential neighborhoods (weather permitting). These adjustments are further discussed in section IV.F (Noise).

#### **j. Existing JMMC Transportation Demand Management**

Currently, the John Muir Medical Center participates in the *TRANSPAC Transportation Demand Management (TDM) Program*, a voluntary program administered by TRANSPAC as part of the city of Walnut Creek's *TRANSPAC Trip Reduction Ordinance*. This program was mandatory prior to adoption of California State Senate Bill 437 (the "Lewis Bill"), which became effective on January 1, 1996. SB 437 prohibits local air districts and other local or regional agencies from imposing any requirement on an employer to implement an employee trip reduction plan unless the requirement is expressly mandated by federal law and the elimination of the program will result in the imposition of federal sanctions.<sup>1</sup> Because federal sanctions are only imposed in air basins which do not meet minimum federal standards (i.e., in federally-designated "nonattainment" areas) for ozone or other mobile source-related pollutants, and the San Francisco Bay Air Basin currently meets the relevant federal standards, TRANSPAC and the city may not require JMMC to implement TDM measures. However, JMMC has indicated its intention to continue its current TDM program on a voluntary basis.

Current JMMC TDM measures include a *Guaranteed Ride Home* program, preferential carpool/vanpool parking provisions, subsidized transit tickets (BART and County Connection), and subsidized vanpools, as well as bike racks/locker storage areas and showers for those bicycling and walking. In addition, JMMC has a bi-weekly drawing for cash prizes for employees using a commute alternative or parking offsite. A peak hour shuttle van travels between JMMC and the St. John Vianney Church offsite parking lot. To promote its TDM program, JMMC distributes a bi-weekly transportation newsletter to its employees, maintains

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<sup>1</sup>California Environmental Insider, "Special Report: New Legislation," October 15, 1995, p. 4.



transportation information postings on two in-house bulletin boards, and conducts a transportation orientation program for new employees.<sup>1</sup>

To comply with TRANSPAC TSM guidelines, JMMC also completes an annual TRANSPAC Transportation Survey for the medical center which documents the current status of the JMMC TDM program. The results of the 1995 JMMC TRANSPAC Transportation survey indicate a current vehicle use per employee ratio (VER) of 0.85.<sup>2</sup> The VER is an indication of the number of vehicles used relative to the overall number of employees at the medical center. Any reduction in the VER ratio indicates an increase in employee use of alternative modes--i.e., transit, carpooling, or vanpooling.

As surveyed, the predominant current travel mode for JMMC employees is to drive alone. The 1995 peak period commute mode data for JMMC employees indicate that 76.2 percent drive alone, 14.6 percent carpool, 1.3 percent use public transit, 2.1 percent walk or bicycle, and 5.8 percent use other modes to get to/from the campus. In an effort to lower the center's VER ratio, JMMC also participates in annual commute alternative events such as California Rideshare Week, Contra Costa County Bike-to-Work-Day, Try Transit Week, Spare the Air days, and an employer-sponsored commute alternative day.

## 2. IMPACTS

### a. Significance Criteria

(1) General Criteria. Based on Appendix G of the CEQA Guidelines,<sup>3</sup> a project or cumulative transportation impact is considered to be *significant* in this EIR analysis if:

- the project-related transportation system changes will conflict with an adopted plan or goal of the city pertaining to transportation, including violation of an applicable, city-adopted level-of-service standard, or
- the impact involves an increase in traffic which is *substantial* in relation to the existing traffic load and capacity of the street system.

(2) CCTA Criteria. As mandated by state law, the Contra Costa Transportation Authority (CCTA) designates *Routes of Regional Significance* within its jurisdiction. Roadways are designated as Routes of Regional Significance if they (a) connect to two or more "regions" of

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<sup>1</sup>Allan Moore, Gagen, McCoy, McMahon, and Armstrong, letter to Sandra Meyer, City of Walnut Creek, "JMMC Parking Structure Issue Ordinance No. 1647: Master Plan Application Offsite Parking Program," November 21, 1995.

<sup>2</sup>Transpac, 1995 Employee Transportation Survey Results, John Muir Medical Center.

<sup>3</sup>State Office of Planning and Research, CEQA Guidelines, Appendix G, items a and i; 1986.

the county; (b) connect across county boundaries; (c) serve significant amounts of through-traffic; or (d) provide access to a regional highway or transit facility (e.g., a BART station or freeway interchange). Based on this criteria, Ygnacio Valley Road has been designated as a key Route of Regional Significance.

Most of the Routes of Regional Significance in Contra Costa County currently operate at poor levels of service. Operational conditions on these routes will continue to deteriorate unless appropriate action is taken. TRANSPAC (the sub-regional transportation planning agency for the Central/East Contra Costa County area), in association with the CCTA, has developed the TRANSPAC Action Plan which establishes traffic service objectives to meet the goals of the Contra Costa Transportation Improvement and Growth Management Program. The TRANSPAC Action Plan establishes the following traffic service objectives:<sup>1</sup>

- *increase peak period average vehicle occupancy for work trips on Regional Routes by 2010;*
- *(encourage) a minimum peak hour average vehicle occupancy of 1.2 persons per vehicle;*
- *increase the proportion of peak period work trips made on transit by 25 percent by 2000 and 50 percent by 2010; and*
- *(achieve) a delay index (D.I) of 2.0, with a minimum peak-hour average speed of 15 mph (a delay index refers to the observed travel time divided by the free-flow travel time).*

No intersection level of service (LOS) objectives have been established by TRANSPAC for Routes of Regional Significance. However, any project impacts that would cause operations on Ygnacio Valley Road to fall below the operating objectives described above are considered in this EIR to be in conflict with an adopted transportation goal and thus, a *significant adverse impact*. The TRANSPAC Action Plan also states that intersections along Routes of Regional Significance for which action plans have been prepared must be mitigated to the extent possible.<sup>2</sup>

The study segment of Ygnacio Valley Road between Civic and Bancroft already falls below the TRANSPAC objective of a 15 mph minimum peak hour average speed, and its delay index (off-peak travel time/peak travel time) already exceeds 2.0. Thus, any increase in peak hour (peak direction) traffic would contribute to an existing deficient condition. For the purposes of this analysis, it is assumed that any project-generated traffic increases on Ygnacio Valley Road would represent a *significant adverse impact* requiring fair-share mitigation by the project.

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<sup>1</sup>Contra Costa Transportation Authority, Contra Costa Countywide Comprehensive Transportation Plan, Central County--TRANSPAC, page I-127, adopted July 19, 1995.

<sup>2</sup>Contra Costa Transportation Authority, TRANSPAC Action Plan, adopted July 19, 1995, pages 44 and 45.

(3) City Criteria. The City of Walnut Creek General Plan Transportation Element sets forth local intersection and roadway level-of-service standards. Specifically, Routes of Regional Significance such as Ygnacio Valley Road must meet the applicable TRANSPAC Action Plan requirements described above. Other intersections, including the two study intersections which are not on Ygnacio Valley Road (Montego/Tampico and Montego/La Casa Via), are subject to a minimum intersection LOS of D if they are signalized.<sup>1</sup> However, because these two intersections are currently not signalized, no local LOS standard applies. For purposes of this EIR, any project-facilitated deterioration in unsignalized intersection LOS to E or worse, or any project-facilitated traffic increase at an unsignalized intersection already operating at LOS E or worse, would be considered a *significant adverse impact* requiring fair-share mitigation by the project.

#### **b. Assessment Approach and Methodology**

As explained in section III.D.1.d of this EIR (Project Description, Proposed Master Plan, Development Units), the proposed Master Plan includes a suggested phasing approach to implementation of various Master Plan proposed infrastructure improvements and amenities (roadway improvements, landscaping improvements, trail improvements), where a specific set of incremental improvements would be linked to an increment of medical center floor area expansion. The approximately 833,000 square feet of floor area expansion provided for in the Master Plan is broken down in the Master Plan into a series of square-footage increments referred to as "development units." Implementation of the various common infrastructure and amenity improvements called for in the Master Plan would be linked to completion of these various floor area expansion (square footage) "development units" on each of the three JMMC subareas--the Main Campus Site, La Casa Court Site, and La Casa Via Site. These "development units" and associated improvement phasings are illustrated by Figures 6 and 7 in section III of this EIR.

For EIR traffic impact and mitigation identification purposes, this traffic impact analysis has been developed to correspond to similar increments of expansion (floor area). However, to reduce the number of possible project transportation impact and mitigation permutations to a manageable level, the "development units" illustrated on Figures 6 and 7 have been consolidated and adjusted to reflect overall, areawide square footage amounts (i.e., total "Expansion Increments") rather than independent square footage amounts for each of the project subareas.

In addition, in order to utilize the central CMP demand model for future base conditions described above in section 1.k, Master Plan buildout is conservatively assumed to occur in the year 2010, whereas the 20-year life of the Master Plan may allow actual buildout to take place in the year 2016 if the project is approved in 1996.

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<sup>1</sup>City of Walnut Creek, General Plan, Transportation Element, Chapter 4, p. 4-8, July 1993.



Based on these considerations, project traffic impacts have been evaluated for the following five future scenarios:

- **A 1997 cumulative land use scenario with Expansion Increment 1.** This scenario assumes a "base" of two years of cumulative traffic growth over the "existing" 1995 levels along Ygnacio Valley Road, plus project *Expansion Increment 1* which would include 100,000 square feet of medical center growth.
- **A 1999 cumulative land use scenario with Expansion Increment 2.** This scenario assumes a "base" of 4 years of cumulative through-volume traffic growth over the "existing" 1995 levels along Ygnacio Valley Road, plus project *Expansion Increment 2* which would increase medical center growth to 233,000 square feet.
- **A 2001 cumulative land use scenario with Expansion Increment 3.** This scenario assumes a "base" of 6 years of cumulative through-volume traffic growth over the "existing" 1995 levels along Ygnacio Valley Road, plus project *Expansion Increment 3* which would increase medical center growth to 333,000 square feet.
- **A 2004 cumulative land use scenario with Expansion Increment 4.** This scenario assumes a "base" of 9 years of cumulative through-volume traffic growth over the "existing" 1995 levels along Ygnacio Valley Road, plus project *Expansion Increment 4* which would increase medical center growth to 433,000 square feet.
- **A 2010 cumulative land use scenario with Expansion Increment 5 (Master Plan Buildout).** This scenario assumes a future "base case" where cumulative through-volumes along Ygnacio Valley Road would increase over 1995 "existing" levels consistent with year 2010 future baseline projections, and project *Expansion Increment 5* would increase medical center growth to a total of 833,000 square feet.

The above project Expansion Increments assume a total buildout square footage distribution of 64 percent for the Main Campus Site, 18 percent for the La Casa Court Site, and 18 percent for the 230 La Casa Via Site (based on the Master Plan totals).

### **c. Trip Generation**

As discussed in detail in Section III, Project Description, each Expansion Increment could involve a wide range of medical uses, including hospital, continuing care, and medical office type land uses, but the total new square footage allocation to hospital, medical office and continuing care uses would be restricted by the Master Plan. Based on the maximum square footage subtotal permitted by the Master Plan for each of these general use categories, as described in section III, Table 7, it was assumed that *Expansion Increment 5* (Master Plan Buildout) would contain 74 percent medical center (523,000 square feet of new hospital uses), 20 percent continuing care (240,000 square feet of new continuing care uses), and six percent

medical office uses (72,000 square feet of new medical office uses).<sup>1</sup> Expansion Increments 1 through 4 would each represent a specific amount of incremental square footage toward the Master Plan Buildout of approximately 833,000 additional square feet (*Expansion Increment 5*).

Vehicle trip generation rates for the proposed project have been estimated based on actual driveway counts conducted at the medical center as well as research conducted by the Institute of Transportation Engineers (ITE) for continuing care and medical office uses.<sup>2</sup> Trip rates for the hospital use were developed by the JMMC transportation planners, Fehr & Peers Associates, and corroborated by recent counts conducted by the EIR transportation planners, Omni-Means, Ltd.

Peak hour trip computations for the project as a whole are listed in Table 13. Peak hour trip generation estimates for each of the project *Expansion Increments* are shown in Table 14. At Master Plan Buildout (completion of *Expansion Increment 5*), the project would generate 856 net new AM peak hour trips and 834 net new PM peak hour trips. Peak hour trip totals for the project at buildout, broken down by major use categories, are shown in Table 14.

#### d. Trip Distribution

(1) Distribution Basis. The anticipated distribution of project-plus-future-base AM and PM peak hour traffic volumes to the local roadway network has been estimated based on: (a) existing traffic flows at the two medical center driveways and at the Ygnacio Valley/La Casa Via intersection,<sup>3</sup> (b) Central Contra Costa County/CMP travel demand model projections,<sup>4</sup> and (c) review by the EIR transportation planner, Omni-Means, Ltd., of a recent transportation study conducted for the John Muir Medical Center by Fehr & Peers

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<sup>1</sup>These square footage breakdowns were provided by the applicant. The breakdowns and associated trip generation rate assumptions were developed by the EIR transportation consultant, Omni-Means, Ltd., in consultation with the City Transportation Administrator, John Hall, in November and December 1995.

<sup>2</sup>Fehr and Peers, Driveway counts at JMMC in August 1992; Omni-Means, Driveway counts at JMMC in November, 1995; ITE, Trip Generation, Fifth Edition, trip research for medical office, nursing home, and congregate care; 1991

<sup>3</sup>Omni-Means, Ltd., driveway counts at John Muir Medical Center on November 14, 1995 and December 15, 1995

<sup>4</sup>Luba Wyznyckyj, Transportation Modeler, Korve Engineers, Correspondence regarding the Central/CMP transportation model for Contra Costa County, November 21, 1995.

Table 13  
PEAK HOUR TRIP GENERATION INCREASE FOR JMMC MASTER PLAN EXPANSION  
AT BUILDOUT

<u>Project Component</u>	<u>AM Trip Rate</u>	<u>AM Trips</u>	<u>PM Trip Rate</u>	<u>PM Trips</u>
Hospital (888,000 sq. ft.)	1.15/ksf	1,021	0.91/ksf	808
Continuing Care (240,000 sq. ft.)	0.23/ksf	55	0.25/ksf	60
Medical Office (72,000 sq. ft.)	2.69/ksf	194	4.08/ksf	294
<i>Buildout Total (1,200,000 sq. ft.)</i>		<i>1,270</i>		<i>1,162</i>
Less Existing Trips for existing 367,000 square feet		(414)		(328)
<b><i>Net Project Trip Generation Increase:</i></b>		<b><i>856</i></b>		<b><i>834</i></b>

SOURCE: Omni-Means, Ltd



Table 14

PEAK HOUR TRIP GENERATION BREAKDOWN BY JMMC EXPANSION INCREMENT

<u>Expansion Increment</u>	<u>Percent of Total New Permitted Master Plan Development</u>	<u>AM Peak Trips</u>			<u>PM Peak Trips</u>		
		<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>
Increment 1 (100,000 sq. ft. added)	12%	103	69	34	100	34	66
Increment 2 (233,000 sq. ft. added)	28%	240	161	79	234	80	154
Increment 3 (333,000 sq. ft. added)	40%	342	230	113	334	114	220
Increment 4 (433,000 sq. ft. added)	58%	496	332	164	484	165	319
Increment 5 (833,000 sq. ft. added)	100%	856	574	28	834	284	550

SOURCE: Omni-Means, Ltd.

Associates.<sup>1</sup> This latter traffic study evaluated JMMC employee zip code information to further define project distribution patterns.

(2) Master Plan Proposed Circulation Improvements. Proposed circulation improvements related to project development increments are discussed in detail in section III.D.1.d of this EIR (Project Description, Development Units).

Planned internal and off-site circulation improvements would occur in the project study area beginning with *Expansion Increment 1* corresponding to the phasing indicated on Figures 6 and 7 in section III. These circulation improvements would change existing (local) and project vehicle distributions on and around the site.

(3) Trip Assignments. Projected peak hour traffic flow conditions at the eight study intersections under the project buildout scenario (*Expansion Increment 5*), based on the trip distribution methodology described above, are diagrammed on Figure 33. As shown, peak hour trip distribution with the project is anticipated to be divided evenly on Ygnacio Valley Road. Fifty percent of the project trips would be to/from the west on Ygnacio Valley Road and 50 percent would be to/from the east. Based on existing turn restrictions to the west at the Homestead and Walnut intersections, project traffic would not begin to disperse until reaching the Ygnacio Valley/Civic intersection. At this point, four percent would travel to/from the south on Civic Drive and another four percent would travel to/from the north on the same street. To the east, it is assumed that two percent of the project traffic would be to/from San Carlos Drive (south). At the Ygnacio Valley/Walnut-Bancroft intersection, another four percent would be to/from the north on Bancroft Road and four percent to/from the south on Walnut Avenue. It is noted that out of the 50 percent project traffic to/from the west, eight percent would use Montego to access to/from the site.

#### e. Project Intersection Impacts

Projected AM and PM peak hour project volumes for each *Expansion Increment* (1, 2, 3, etc.) have been added to associated future base year volumes (1997, 1999, 2001, etc.) to determine intersection levels of service. The resulting roadway system LOS impact conclusions for each of the five increments of project expansion are explained below and summarized in Table 15.

(1) Expansion Increment 1, Base 1997. With construction of Expansion Increment 1 (100,000 square feet of new development) and cumulative traffic growth, LOS at two of the study intersections along Ygnacio Valley Road is anticipated to worsen significantly from future base conditions without the project: (a) the *Ygnacio Valley/Marchbanks-Tampico* intersection is anticipated to change from LOS C (0.80) to D (0.81) during the AM peak hour;

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<sup>1</sup>Fehr & Peers Associates. Traffic and Parking Impact Study for the John Muir Medical Center Master Plan, February, 1993.

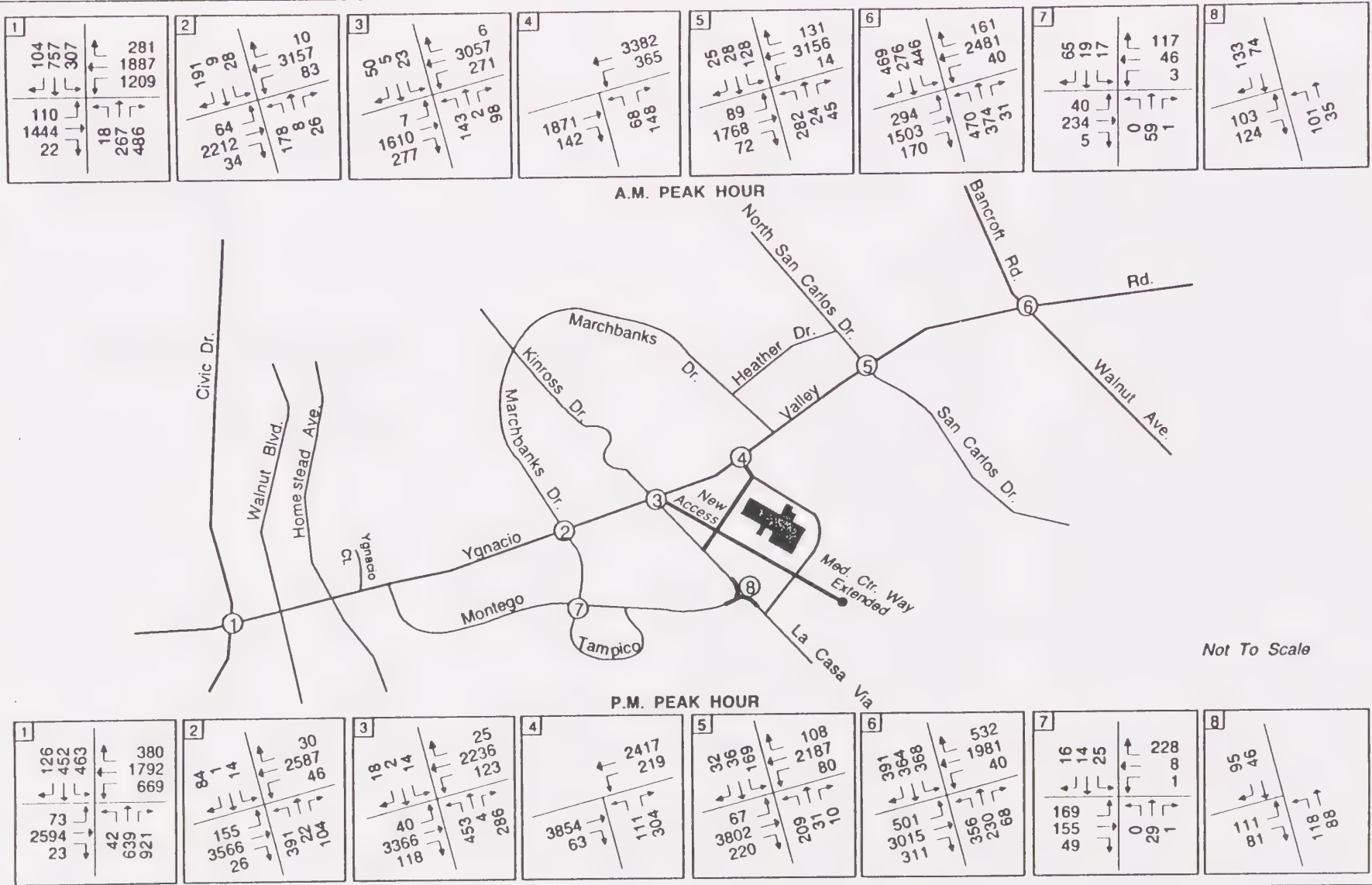


Figure 33  
**FUTURE BASE (YEAR 2010) AM AND PM  
 PEAK HOUR VOLUMES WITH PROJECT**

SOURCE: Omni Means, Ltd.



Table 15

INTERSECTION OPERATION--EXISTING AND PROJECTED (BY PROJECT EXPANSION INCREMENT)

Intersection		1996 (Existing)				1997 Base with Increment 1				1999 Base with Increment 2				2001 Base with Increment 3				2004 Base with Increment 4				2010 Base with Increment 5				2010 Base without Project			
		AM		PM		AM		PM		AM		PM		AM		PM		AM		PM		AM		PM		AM		PM	
		LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Signalized <sup>1</sup>																													
1.	Ygnacio Valley Road/Civic	D	0.90	F	1.02	E	0.91	F	1.03	E	0.92	F	1.04	E	0.93	F	1.05	E	0.94	F	1.06	E	0.97	F	1.10	E	0.92	F	1.06
2.	Ygnacio Valley Road/ Marchbanks-Tampico	C	0.80	D	0.85	D	0.81	D	0.86	D	0.81	D	0.87	D	0.83	E	0.94	D	0.85	E	0.96	D	0.86	F	1.00	C	0.80	D	0.89
3.	Ygnacio Valley Road/La Casa Via (or Medical Cntr Wy)	B	0.69	D	0.87	B	0.70	D	0.89	B	0.70	E	0.92	B	0.69	D	0.88	B	0.70	D	0.90	C	0.72	E	0.95	B	0.69	E	0.92
4.	Ygnacio Valley Road/JMMC North Driveway	B	0.66	C	0.76	B	0.67	C	0.78	B	0.68	D	0.81	B	0.68	D	0.83	B	0.68	D	0.86	B	0.69	E	0.94	B	0.66	C	0.80
5.	Ygnacio Valley Road/San Carlos	D	0.86	E	0.92	D	0.87	E	0.94	D	0.88	E	0.95	D	0.88	E	0.97	D	0.89	E	0.99	E	0.92	F	1.03	D	0.86	E	0.97
6.	Ygnacio Valley Road/Walnut- Bancroft	D	0.90	D	0.86	E	0.91	D	0.89	E	0.92	E	0.92	E	0.93	E	0.92	E	0.94	E	0.94	E	0.97	E	0.98	D	0.90	E	0.91
Unsignalized <sup>2</sup>																													
7.	Montego/Tampico	A	1.9	A	2.6	A	2.0	A	2.7	A	2.0	A	2.7	A	2.4	A	3.3	A	2.5	A	3.5	A	2.6	A	3.6	A	1.9	A	2.6
8.	Montego/La Casa Via	A		A		A		A		A		A		A		A		A		A		A		A		A		A	

SOURCE Omni-Means, Ltd., Wagstaff and Associates, 1996

<sup>1</sup> Signalized intersection LOS based on CCTA methodology

<sup>2</sup> LOS for an all-way-stop controlled intersection reflects vehicle delay in seconds. LOS for unsignalized intersection refers to the minor street (stop-sign controlled) turning movement because a v/c ratio cannot be calculated for an unsignalized intersection

and (b) the *Ygnacio Valley/Walnut-Bancroft* intersection is anticipated to change from LOS D (0.90) to E (0.91) during the AM peak hour. Based on TRANSPAC arterial roadway level of service criteria, this level of LOS degradation would be considered a *potentially significant adverse impact (T Impact 1)*. (See criteria 1 and 2 in section 2.a above.)

*Assumptions:* Based on the assumed distribution of new square footage and the circulation improvements required pursuant to the Development Unit diagram shown in Figure 7, new project circulation improvements would include the narrowing of La Casa Via southwest of the main campus as well as construction of the medical center entrance court. Neither of these circulation improvements are anticipated to have a noticeable effect on local or project traffic distributions.

(2) Expansion Increment 2, Base Year 1999. With construction of Expansion Increment 2 (233,000 square feet of new development) and cumulative traffic growth, LOS at three of the study intersections along Ygnacio Valley Road is expected to worsen significantly from future base conditions without the project: (a) the *Ygnacio Valley/Marchbanks-Tampico* intersection would change from LOS C (0.80) to D (0.81) during the AM peak hour; (b) the *Ygnacio Valley/Walnut-Bancroft* intersection would change from LOS D (0.90) to E (0.92) during the AM peak hour; and (c) the intersection of *Ygnacio Valley/JMMC north driveway* would change from LOS C (0.80) to D (0.81) during the PM peak hour. Based on TRANSPAC arterial roadway level of service criteria, this level of LOS degradation would be considered a *potentially significant adverse impact (T Impact 2)*. (See criteria 1 and 2 in section 2.a above.)

*Assumptions:* Based on the assumed distribution of new square footage and the circulation improvements required pursuant to the Development Unit diagram shown in Figure 7, new circulation improvements are assumed to include (a) a new north-south street connecting the JMMC north driveway and La Casa Via, and (b) a new service road around the north and east sides of the main campus. These additional improvements would change internal circulation on the main campus but would not change overall local or project traffic distribution patterns.

(3) Expansion Increment 3, Base Year 2001. With construction of Expansion Increment 3 (333,000 square feet of new development) and cumulative traffic growth, LOS at three of the study intersections along Ygnacio Valley Road is expected to worsen significantly as compared to future base conditions without the project: (a) the *Ygnacio Valley/Marchbanks-Tampico* intersection is anticipated to change from LOS C (0.80) to D (0.83) during the AM peak hour and LOS D (0.89) to E (0.94) during the PM peak hour; (b) the intersection of *Ygnacio Valley/Walnut-Bancroft* is anticipated to change from LOS D (0.90) to E (0.93) during the AM peak hour; and (c) the intersection of *Ygnacio Valley/JMMC north driveway* is anticipated to change from LOS C (0.80) to D (0.83) during the PM peak hour. Based on TRANSPAC arterial roadway level of service criteria, this level of LOS degradation to intersection level of service would be considered a *potentially significant adverse impact (T Impact 3)*. (See criteria 1 and 2 in section 2.a above.)

*Assumptions:* Based on the assumed distribution of new square footage and the circulation improvements required pursuant to the Development Unit diagram shown in Figure 7, new project circulation improvements are assumed to include (a) the re-configuration of the Montego/La Casa Via intersection, and (b) improvements to La Casa Via southwest of the La Casa Court site. With the re-configuration of the Montego/La Casa Via intersection, both local and project trip distributions are expected to change. Approximately 66 percent of the existing through-traffic on La Casa Via is anticipated to shift to Montego to access Ygnacio Valley Road, ten percent of the eastbound project trips are expected to shift from the Ygnacio Valley/La Casa Via intersection to the main JMMC north driveway, and 18 percent of the project traffic to/from the west accessing the La Casa Court and 230 La Casa Via Sites is expected also to use Montego to get to/from Ygnacio Valley.

(4) Expansion Increment 4, Base Year 2004. With construction of Expansion Increment 4 (483,000 square feet of new development) and cumulative traffic growth, LOS at three of the study intersections along Ygnacio Valley Road is expected to worsen significantly as compared to future base conditions without the project: (a) the *Ygnacio Valley/Marchbanks-Tampico* intersection is anticipated to change from LOS C (0.80) to D (0.85) during the AM peak hour and LOS D (0.89) to E (0.96) during the PM peak hour; (b) the intersection of *Ygnacio Valley/Walnut-Bancroft* is anticipated to change from LOS D (0.90) to E (0.94) during the AM peak hour; and (c) the intersection of *Ygnacio Valley/JMMC north driveway* is anticipated to change from LOS C (0.80) to D (0.86) during the PM peak hour. Based on TRANSPAC arterial roadway level of service criteria, this level of degradation to intersection level of service would be considered a *potentially significant adverse impact (T Impact 4)*. (See criteria 1 and 2 in section 2.a above.)

*Assumptions:* Based on the assumed distribution of new square footage and the circulation improvements required pursuant to the Development Unit diagram shown in Figure 7, new project circulation improvements are assumed to include (a) a neighborhood entrance cul-de-sac on La Casa Via, and (b) a pedestrian link from the main campus to the Shell Ridge medical office buildings on the southwest side of La Casa Via. Local and project trip distribution patterns under this scenario are anticipated to be similar to those identified for Expansion Increment 3 above.

(5) Expansion Increment 5 (Buildout), Base Year 2010. With construction of Expansion Increment 5 (833,000 square feet of new development) and cumulative traffic growth, LOS at five of the study intersections along Ygnacio Valley Road is expected to worsen significantly as compared to future base conditions: (a) the *Ygnacio Valley/Marchbanks-Tampico* intersection is anticipated to change from LOS C (0.80) to D (0.86) during the AM peak hour and LOS D (0.89) to F (1.00) during the PM peak hour; (b) the intersection of *Ygnacio Valley/Walnut-Bancroft* would change from LOS D (0.90) to E (0.97) during the AM peak hour; (c) the intersection of *Ygnacio Valley/JMMC north driveway* is anticipated to change from LOS C (0.80) to E (0.94) during the PM peak hour; (d) the intersection of *Ygnacio Valley/La Casa Via* would change from LOS B (0.69) to C (0.72) during the AM peak hour; and (e) the *Ygnacio/San Carlos* intersection is anticipated to change from LOS D (0.86) to LOS E (0.92)



during the AM peak hour and from LOS E (0.99) to F (1.03) during the PM peak hour. Based on TRANSPAC arterial roadway level of service criteria, this level of degradation to intersection level of service would be considered a *potentially significant adverse impact (T Impact 5)*. (See criteria 1 and 2 in section 2.a above.)

*Assumptions:* Based on the assumed distribution of new square footage and the circulation improvements required pursuant to the Development Unit diagram shown in Figure 7, new project circulation improvements are assumed to include (a) acquisition of 1515 Ygnacio Valley Road and extension of Medical Center Way to Ygnacio Valley Road; (b) closure of the La Casa Via/Ygnacio Valley Road intersection; and (c) acquisition of a portion of the Walnut Creek Hospital site and full extension of Medical Center Way to the La Casa Court Site. With these circulation improvements, project traffic distribution patterns would change again, with another five percent of the eastbound project trips shifting from the Ygnacio Valley/La Casa Via intersection to the main JMMC driveway, and nine percent of the project traffic to/from the west accessing the La Casa Court and 230 La Casa Via sites by shifting to Montego to get to/from Ygnacio Valley Road.

#### **f. Project Arterial Roadway Impacts**

To measure the project's future contribution to congestion along Ygnacio Valley Road, a comparison has been made between 2010 base case arterial LOS without and with JMMC *Expansion Increment 5* (buildout). The comparison is shown in Table 16.

(1) Future Base Case Conditions without Project. As shown under the 2010 base scenario without the project, arterial LOS along Ygnacio Valley Road during the AM peak commute direction would remain at LOS F with an average travel speed of 11.2 mph--i.e., the same as existing conditions. The existing conditions are expected to remain essentially unchanged because this commute direction is already near capacity. During the PM peak hour, the eastbound commute direction would be F with a substantially lower travel speed of 9.3 mph (as compared to 14.0 mph for the existing condition).

(2) Future Base Case Conditions Plus Project Expansion Increment 5. With completion and occupancy of JMMC *Expansion Increment 5*, the average travel speed would be reduced by one mile per hour during both the AM westbound commute direction and PM eastbound commute direction, and the overall arterial roadway LOS along Ygnacio Valley Road would remain at F during both time periods. This effect would represent a *significant adverse impact (T Impact 6)*. (See criteria 1 and 2 in section 2.a above.)

#### **g. Project Internal Circulation/Access Impacts**

(1) Proposed Circulation Improvements and Sequences. Buildout of the proposed JMMC Master Plan and associated roadway improvements would involve substantial changes in the local circulation/access network. The Master Plan indicates that a number of basic local circulation changes would be phased in conjunction with overall increments of floor area

Table 16  
YGNACIO VALLEY ROAD LEVEL OF SERVICE AND AVERAGE TRAVEL SPEEDS<sup>1</sup>--  
EXISTING AND PROJECTED

<u>Condition</u>	<u>Direction/Peak Hour</u>	<u>Arterial LOS</u>	<u>Avg. Travel Speed</u>
Existing	Westbound/AM Peak	F	11.2 mph
Existing	Eastbound/PM Peak	E	14.0 mph
2010 Future Base (without project)	Westbound/AM Peak	F	11.2 mph
2010 Future Base (without project)	Eastbound/PM Peak	F	9.30 mph
Future Base with Expansion Increment 5 (project buildout)	Westbound/AM Peak	F	10.2 mph (9% speed reduction)
Future Base with Expansion Increment 5 (project buildout)	Eastbound/PM Peak	F	8.30 mph (11% speed reduction)

SOURCE: Omni-Means, Ltd., January 1996.

<sup>1</sup> The arterial LOS and average travel speeds in this table depict conditions on the Ygnacio Valley Roadway segment between the Bancroft-Walnut and Civic intersections, and were computed based on the methodology described in the Transportation Research Board's Highway Capacity Manual: Special Report 209, Urban and Suburban Arterials, Chapter 11, Third Edition, Updated 1994.

expansion (development units) as illustrated on Figures 6 and 7 in section III of this EIR. The Master Plan also identifies some circulation system improvements that would be associated with development of each of the three individual Master Plan subareas--the Main Campus Site, the La Casa Court Site, and the 230 La Casa Via Site. However, for purposes of future flexibility, the 20-year Master Plan does not specify a sequence of development among these three subareas. The ultimate schedule for these subareas improvements would be consistent with the unspecified development timing on the various sites.

Those Master Plan proposed roadway changes which would be linked to incremental overall floor area expansion subtotals ("development units") are grouped below in terms of the five, non-site specific Expansion Increments identified in this traffic analysis:

*Expansion Increment 1.* At 100,000 square feet of development, La Casa Via would be narrowed adjacent to the Main Campus Site, the medical center entrance court would be constructed, and a new service road would be constructed around the back of Walnut Creek Hospital.

*Expansion Increment 2.* At 233,000 square feet of development, the existing peripheral service road at the rear of the Main Campus Site would be improved and extended to La Casa Via. A new "North-South Road" would be constructed from the current Ygnacio Valley Road access through the Main Campus Site to La Casa Via along the western edge of the site. Finally, the new "Medical Center Way" roadway would be constructed to link the new street with the service road.

*Expansion Increments 3 and 4.* With expansion increments reaching 333,000 and 483,000 square feet of development, the network would include the above changes plus a realignment of La Casa Via/Montego. This realignment would essentially curve La Casa Via into Montego creating a new through route to the La Casa Via neighborhood that minimizes conflicts with the JMMC core. A circular widening ("roundabout") would also be constructed in La Casa Via adjacent to the La Casa Court and 230 La Casa Via sites, to create a distinct sense of entry to the La Casa Via neighborhood, and to provide a turnaround point prior to the neighborhood.

*Expansion Increment 5.* At Master Plan buildout, all of the above changes would be completed and the Medical Center Way roadway would be completed, including the extensions west to an Ygnacio Valley Road intersection and east to a cul-de-sac serving the JMMC La Casa Court site. La Casa Via between Ygnacio Valley Road and Montego would be narrowed from a collector route to a local street.

(2) Internal Circulation Changes. The sequence of roadway modifications described above, when complete, would shift the physical and circulation orientation of the Main Campus layout from La Casa Via to a new road, Medical Center Way. Construction of Medical Center Way would be required after 250,000 square feet of new construction occurs, although its full extension may be completed prior to that time. This new central access route would be



aligned on an east-west access in line with the existing Main Campus building. The resulting skewed nature of the new Ygnacio Valley/Medical Center Way intersection would create operational conflicts with Ygnacio Valley Road because it would result in a new, much longer crosswalk across Ygnacio Valley Road as compared to the existing crosswalk. This new crosswalk configuration would require much longer pedestrian crossing times for the secondary Medical Center Way signal phase, resulting in much less "green time" for Ygnacio Valley Road through movements (i.e., less frequent or shorter green light periods at the Ygnacio/Medical Center Way intersection for vehicles traveling in both directions on Ygnacio Valley Road). The reduced green time for Ygnacio Valley Road would worsen existing and projected traffic congestion on this roadway, representing a *potentially significant adverse impact (T Impact 7)*. (See criterion 2 in section 2.a above.)

Direct access to La Casa Via from Ygnacio Valley Road would be eliminated. A new through route in and out of the La Casa Via neighborhood would be created by realigning (curving) La Casa Via into Montego, and by converting the existing segment of La Casa Via in front of the Main Campus Site into a narrower local street connecting to a four-way intersection with Medical Center Way and the new north-south access drive on the west, and to a T-intersection where La Casa Via curves into Montego. As a result of these changes, the primary access route to the La Casa Via residential neighborhood would become Montego Road, as intended, with beneficial traffic impacts. However, the modified section of La Casa Via in front of the Main Campus Site (between Montego and Ygnacio Valley Road) would become a more constrained, less direct access to the existing Shell Ridge medical office complex on the south side of La Casa Via, with an awkward connection at the new La Casa Via-Montego curve. Also, the existing main access driveway to the Shell Ridge medical office complex on La Casa Via would be realigned to connect with a curved extension of the new north-south access road. These internal circulation aspects would represent a *potentially significant adverse impact (T Impact 8)*. (See criterion 1 in section 2.a above.)

(3) Medical Office Access from La Casa Via. With JMMC Expansion Increments 1, 2, 3, and 4, La Casa Via would continue to connect with Ygnacio Valley Road. Between Ygnacio Valley Road and the La Casa Via driveway to the Main Campus Site, existing medical office buildings with driveway access from La Casa Via (particularly 1515 Ygnacio Valley Road) experience constrained access to and from La Casa Via during the PM peak hour due to long vehicle queues along the roadway. JMMC Expansion Increment 2 would result in the closure of the existing JMMC driveway off of La Casa Via and the construction of a new La Casa Via access (the north-south road) closer to Ygnacio Valley Road. The resulting shorter approach on La Casa Via between Ygnacio Valley Road and the entrance to the Main Campus Site, together with the additional traffic generated from Expansion Increments 1 through 4, would cause a greater level of vehicle queuing on this segment of La Casa Via, worsening the existing access constraints for the medical office buildings at this location. This would represent a *potentially significant adverse impact (T Impact 9)*. (See criterion 1 in section 2.a above.)

(4) Emergency Vehicle Access. Emergency vehicle access to and from the JMMC Main Campus Site would essentially remain unchanged until the advent of *Expansion Increment 5*. Emergency vehicles would still be able to travel to and from La Casa Via to the medical center's emergency trauma center. With the re-configuration of the Montego/La Casa Via intersection, emergency access to and from the La Casa Via neighborhood (southeast of the main campus) would also remain adequate.

Currently, access to the La Casa Via neighborhood (for Contra Costa County Fire Protection District) is gained from Ygnacio Valley Road by way of La Casa Via, Tampico, and Montego. With completion of *Expansion Increment 5*, La Casa Via would no longer connect with Ygnacio Valley Road. Emergency fire vehicles coming from the east would have to alter their access routes to the La Casa Via neighborhood and use Medical Center Way or the JMMC north driveway. (Fire trucks coming from the west already use Tampico and Montego to access the La Casa Via neighborhood). Emergency vehicles may actually reduce their response times by using the north JMMC driveway and new north-south street to access La Casa Via. According to Contra Costa County Fire Protection District staff, these route changes would not be expected to reduce response times to substandard levels and thus would be considered a less than significant impact.<sup>1</sup> (See criterion 1 in section 2.a above.)

The Master Plan-proposed buffer areas and pedestrian trail/bike paths located along the east sides of the La Casa Court and 230 La Casa Via sites would also be adequate for necessary emergency vehicle access to the rear of these sites, using the planned bicycle trail pavement.<sup>2</sup>

The three Master Plan-proposed circular turnarounds ("roundabouts") at the neighborhood entrance on La Casa Via, lobby entrance of the Main Campus Site, and rear of the La Casa Court Site, have also been analyzed for emergency vehicle access adequacy. Currently, emergency fire vehicles require a minimum outside turning radius of 42 feet. The JMMC Master Plan design guidelines indicate the proposed radius at this location would be 34 feet.<sup>3</sup> This radius would not meet minimum emergency access requirements and would therefore result in a *significant adverse impact (T Impact 10)*. (See criterion 1 in section 2.a above.)

#### **h. Project Parking Impacts**

(1) Proposed Parking Plan. The Master Plan is particularly conceptual in nature with respect to parking amounts, location and phasing. The Master Plan does not identify specific parking

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<sup>1</sup>Richard S. Ryan, Fire Inspector, Contra Costa County Fire Protection District, Bureau of Fire Prevention, personal communication, February 6, 1996.

<sup>2</sup>Ibid.

<sup>3</sup>Thistlethwaite Architectural Group, JMMC Campus Master Plan Application, Supplement 1, Chapters 10 and 11, page 74, December 2, 1995.

facilities or specify a standard number of new spaces to be provided. Instead, to provide JMMC-desired flexibility in light of an unknown future medical center use breakdown (i.e., unknown floor space allocation to hospital, clinic, medical office, etc.), the JMMC proposes that the Planned Unit Development (P-D) Ordinance to be adopted with the requested Master Plan and rezoning include a general requirement that specific parking requirements be determined by the city at the time of each individual future application for a specific development under the Master Plan. The P-D Ordinance would require that each individual applicant submit a *parking study* to the city analyzing the number of spaces necessary based on the specific mix of uses proposed, the character of existing medical center parking demands at the time, the amount of existing parking spaces to be removed as a result of the project, etc. Under the JMMC-proposed P-D zoning provisions, the city would be able to require a parking standard not exceeding 2.9 spaces per 1,000 square feet of floor area.

(2) Parking Plan Adequacy. In the absence of detailed information on parking facilities, the city's current "Off Street Parking and Loading Regulations" (effective February 16, 1996) have been utilized by the EIR transportation consultant to approximate project-related parking demand at buildout. These existing regulations provide specific parking supply ratios which can be applied for the medical office, congregate care and skilled nursing floor area total maximums that are stipulated as a part of the Master Plan (see section III, Table 6). The total additional parking requirements listed in Table 17 reflect the existing city parking ordinance rates for medical office, congregate care and skilled nursing uses. For "hospital" uses (i.e., medical uses classified as "hospital" in Table 6), the city's regulations indicate that parking requirements "are to be determined in the approval of a Planned Development Permit by the City Council." For this EIR analysis, the rate shown in Table 17 reflects the recently surveyed peak parking demand rate for the existing hospital facility; the actual future hospital parking rate may vary.

Based on these rates and assuming that the highest parking demand uses--medical office and continuing care--are built to the maximum levels indicated in Table 7, the additional 833,000 square feet permitted by the Master Plan would require 1,792 additional parking spaces. For comparison, up to 2,415 additional spaces would be required if the maximum rate of 2.9 spaces per 1,000 square feet proposed in the JMMC PUD ordinance were applied to all future Master Plan uses. Table 17 indicates a total yield of 2,939 spaces.

In addition to this added new floor space parking demand, substantial parking replacement would be necessary to offset losses in the existing parking supply expected as the Master Plan buildout occurs. For example, the current supply includes offsite lots (with 137 spaces) which may not be available over the long-term Master Plan development period. The current supply includes a 100-space gravel overflow parking lot which would be displaced by Master Plan development on the La Casa Court Site.

The JMMC Master Plan would also eliminate curb parking on the JMMC side of La Casa Via, resulting in an additional loss of 10 to 15 curb spaces. The loss of these spaces would further displace those medical personnel (from medical offices on the west side of La Casa Via) who



Table 17  
PARKING DEMAND ESTIMATE FOR JMMC MASTER PLAN BUILDOUT

<u>Master Plan Component</u>	<u>Required Peak Parking</u>	
	<u>Rate</u>	<u>Spaces</u>
Hospital (535,000 sq. ft.)	2.43/1,000 <sup>1</sup>	1,360 spaces
Medical Offices (72,000 sq. ft.)	5.0/1,000 <sup>2</sup>	360 spaces
Congregate Care (120,000 sq. ft.)	0.25/D.U. <sup>2</sup>	25 spaces
Skilled Nursing (120,000 sq. ft.) <sup>4</sup>	0.33/bed <sup>2</sup>	107 spaces
<i>Subtotal (new spaces)</i>	<i>N/A</i>	<i>1,792 spaces</i>
Existing parking (367,000 sq. ft.) <sup>5</sup>	<i>N/A</i>	<i>1,147 spaces</i>
<b><i>TOTAL 1,200,000 sq. ft.</i></b>	<b><i>N/A</i></b>	<b><i>2,939 spaces</i></b>

SOURCE: Omni-Means, Ltd

<sup>1</sup> Based on peak parking demand rates for the existing JMMC facility.

<sup>2</sup> City of Walnut Creek, "Of Street Parking and Loading Regulations," November 21, 1995.

<sup>3</sup> Based on an average of 1,200 square feet per unit, including common areas.

<sup>4</sup> Based on an average of 369 square feet per bed, including common areas.

<sup>5</sup> Including 137 off-site spaces, 111 spaces at the La Casa Court site, and 899 spaces at the Main Campus Site.

currently park in these spaces. Observations of on-street parking indicate that curb parking along Montego is under utilized. Medical personnel from the west side of La Casa Via could park in these spaces but would have a longer walk to/from their destination. This would be considered a less than significant impact.

(3) Parking Rate Cap. By requiring a parking study with each development application under the Master Plan, it is anticipated that onsite parking needs can be met. However, because the exact type of future uses is not known at this time, it is impossible to conclude with certainty that some future land use component of the Master Plan will not have a parking demand rate in excess of the maximum level of 2.9 spaces per 1,000 square feet proposed by the applicant. Because actual parking demand may be found to exceed 2.9 spaces per 1,000 square feet for a particular phase of development, the proposed cap on maximum parking requirements is considered a *potentially significant adverse impact (T Impact 11)*. (See criterion 1 in section 2.a above.)

(4) Parking Access. The Master Plan Design Guidelines for parking access, and anticipated impacts, are described below for each of the three development subareas:

*(a) Main Campus Site.* Staff and physician parking would be located with access points on the proposed service road. Patient and visitor parking would be located in parking structures with access to/from the proposed Medical Center Way. According to the design and development guidelines submitted by the applicant (Supplement 1 to the original JMMC Master Plan application), there would be no parking access to/from La Casa Via.

Specific parking access provisions are not defined. However, parking access could affect traffic flows, particularly along the Medical Center Way roadway through the Main Campus Site. The Master Plan establishes that Medical Center Way would have intersections at the various new connecting streets along the west side of the campus, at the Medical Center Entrance Court and at the peripheral service road. The addition of full access parking structure driveways along Medical Center Way could conflict with the vehicle and pedestrian movements at these intersections. This would be considered a *potentially significant adverse impact (T Impact 12)*. (See criterion 1 in section 2.a above.)

*(b) La Casa Court and 230 La Casa Via Sites.* Onsite surface parking (for patients, visitors and staff) would be provided within the La Casa Court Site and La Casa Via Site. At Master Plan buildout, access to and from the La Casa Court Site surface parking would be primarily from Medical Center Way, with some access also available from La Casa Via. Access to and from the 230 La Casa Via Site would be from La Casa Via, and at buildout, possibly via Medical Center Way if the parking lot of the La Casa Court Site is utilized for through-access and La Casa Via is crossed between the two sites.

Vehicular access to and from both the La Casa Court and 230 La Casa Via site parking areas would be at the proposed La Casa Via neighborhood entrance roundabout. The roundabout design could be somewhat confusing for motorists, particularly for patients and visitors,

resulting in vehicle conflicts at this access point. This condition represents a *potentially significant adverse impact (T Impact 13)*. (See criterion 1 in section 2.a above.)

#### **i. Local Transit Impacts**

(1) Expansion Increments 1 and 2. With completion of Expansion Increments 1 and 2, transit routes to the JMMC would be largely unaffected, with the exception of bus travel on La Casa Via. The planned circulation modifications to La Casa Via (roadway narrowing) would preclude buses from stopping along La Casa Via between Montego and the new North-South roadway on the Main Campus Site. Shell Ridge office complex transit patrons would probably have to access the buses at the JMMC Main Campus or at stops located along Montego (at La Casa Via).

Within the Main Campus Site, a new medical center entrance court would be constructed as part of Expansion Increment 1. Although no specific design plans are available at this time, the new medical center entrance court would need to be designed to accommodate County Connection buses and their respective turning radii.

(2) Expansion Increments 3 and 4. With Expansion Increments 3 and 4, the Montego/La Casa Via intersection would be re-configured with La Casa Via becoming stop-sign controlled instead of Montego. County Connection buses would still be able to access Montego and La Casa Via, but would need to change their routes to access the JMMC main campus. This could be accomplished by using the new north-south street on the main campus or by using the new service roadway. CCCTA planning staff do not believe that the internal street changes proposed with Expansion Increments 3 and 4 would reduce bus headways significantly.<sup>1</sup> Buses would be able to continue accessing the main lobby entrance on the Main Campus Site, although the route to this entrance would have to be modified to utilize the narrowed segment of La Casa Via, and the proposed new north-south roadway and Medical Center Way. According to CCCTA staff, the proposed 12-foot-wide travel lanes on La Casa Via (assuming no on-street parking) would be adequate for bus travel. In order to determine which bus routes would need adjustment with the planned improvements, CCCTA would need to conduct headway travel time runs to identify which route would be most efficient for buses coming from the east or west. These minor route changes would be considered a less than significant impact.

(3) Expansion Increment 5. With Expansion Increment 5, County Connection buses would no longer be able to access La Casa Via directly from Ygnacio Valley Road and would need to change their routes to accommodate patrons living and working off of La Casa Via. In addition, development of the La Casa Court and 230 La Casa Via sites would necessitate new bus stops in front of these sites, on a portion of La Casa Via which is not currently served by

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<sup>1</sup>Cindy Horvath, Planner, Central Contra Costa Transit Authority, Personal communication on March 18, 1996.



bus transit. These required route changes would be considered a *potentially significant adverse impact (T Impact 14)*. (See criterion 1 in section 2.a above.)

#### j. Bicycle/Pedestrian Impacts

The project would not be expected to have any significant adverse impacts on bicycle circulation in the vicinity. Similarly, the pedestrian circulation system around the Main Campus, La Casa Court, and 230 La Casa Via Sites would be expected to improve with each Expansion Increment. The specific pedestrian and bicycle provisions described in the Master Plan and their adequacy are reviewed below.

(1) Expansion Increment 1. As part of *Expansion Increment 1*, landscaped buffers and trails would be constructed on the east side of the La Casa Court Site and on the east side of the 230 La Casa Via Site. In addition, the new medical center entrance court and associated pedestrian provisions would be constructed. All of these improvements would improve pedestrian circulation.

(2) Expansion Increment 3. With completion of *Expansion Increment 3*, the Montego/La Casa Via intersection would be reconfigured and a new mid-block crosswalk would be installed on La Casa Via between the new service road and Montego to provide access between the Main Campus Site and the Shell Ridge medical office area. The associated mid-block crosswalk southeast of the Montego/La Casa Via intersection could result in pedestrian-vehicle conflicts here, since the crosswalk would be located near the apex of the new curve with no stop-sign controls. This aspect would be considered a *potentially significant adverse impact (T Impact 15)*. (See criterion 1 in section 2.a above.)

(3) Expansion Increment 4. With completion of *Expansion Increment 4*, a new pedestrian link would also be created between the Main Campus Site and existing Shell Ridge medical office buildings on the west side of La Casa Via. This new pedestrian connection would help to eliminate pedestrian jay-walking that occurs today at this location. Finally, with completion of *Expansion Increment 5* (buildout), Medical Center Way, with wide sidewalks proposed for both sides, would be extended to provide full access (pedestrian ways, service vehicles and staff/patient/visitor vehicles) into the site. Pedestrian access to/from Ygnacio Valley Road would be provided by the new north-south street and trails located on the new primary entrance drive acquisition. With this comprehensive system of pedestrian trail connections, all three sites would be adequately linked by pedestrian facilities.

(4) Ygnacio Canal Bike Trail Connection. As part of project development, the city of Walnut Creek has also expressed interest in providing a bike path connection through some portion of the project site to the Ygnacio Canal Trail (currently abutting the main campus building on its

northeast side).<sup>1</sup> The bike path connection is currently a funded Capital Improvement project for the year 1996-1997 with the city, pending formal design specifications. This connection would allow bikers or pedestrians to avoid travel along Ygnacio Valley Road between Montego and San Carlos Drive. The Master Plan proposes to provide such a bike path connection along the proposed 45-foot-wide landscaped buffer east of the La Casa Court Site. However, the city prefers that such a bike path connection follow a more direct route to Montego. The Master Plan-proposed alignment of the bike path connection would be considered a *potentially significant adverse impact (T Impact 16)*.

### 3. MITIGATION MEASURES

#### a. Project Intersection Impacts

As explained in the discussion of significance criteria, traffic operations along Ygnacio Valley Road are already deficient and any traffic increase is considered significant. Although mitigation measures are feasible at some study intersections, it is not feasible to eliminate any of the impacts below the level of significance, and for most of the impacted study intersections, physical mitigation to a less than significant level is infeasible, as follows:

(1) Expansion Increment 1. (T Impact 1) The following mitigation measures would reduce the Ygnacio Valley Road impacts of *Expansion Increment 1*:

- At the intersection of *Ygnacio Valley/Marchbanks-Tampico*, add a second northbound left-turn lane and striping to create the following northbound approach lane geometrics: two left-turn lanes and one shared through-right lane. As shown in Table 18, this would result in a buildout intersection LOS of D (0.81) during the AM peak hour (slight improvement) and D (0.89) during the PM peak hour (significant improvement).
- At the intersection of *Ygnacio Valley/JMMC north driveway*, add a second left-turn lane, a second right-turn lane, and striping to create the following northbound approach lane intersection geometrics: two left-turn lanes and two right-turn lanes. In addition, add a second westbound left-turn lane on Ygnacio Valley Road. As shown in Table 18, this would result in a buildout intersection LOS of B (0.68) during the AM peak hour (a significant improvement) and D (0.88) during the PM peak hour.
- At the intersection of *Ygnacio Valley/San Carlos*, add a through lane, a separate right-turn lane, and striping to create the following southbound approach lane intersection geometrics: one left-turn lane, one through lane, and one right-turn lane. In addition, add a second northbound left-turn lane on San Carlos Drive. Change the signal phasing to eight phase operation. As shown in Table 18, this would result in a buildout

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<sup>1</sup> John Hall, Transportation Administrator, City of Walnut Creek, personal communication on January 25, 1996.

Table 18

MITIGATED INTERSECTION LOS: JMMC BUILDOUT (EXPANSION INCREMENT 5)

Study Intersection	Year 2010 Base Plus Project Expansion Increment 5 (Buildout)							
	Unmitigated				Mitigated			
	AM		PM		AM		PM	
	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
Ygnacio Valley/Marchbanks-Tampico	D	0.86	E	1.00	D	0.81	D	0.89
Ygnacio Valley/Medical Center Way <sup>1</sup>	C	0.72	E	0.95	B	0.70	D	0.87
Ygnacio Valley/JMMC North Driveway	B	0.69	E	0.94	B	0.68	D	0.88
Ygnacio Valley/San Carlos	E	0.92	F	1.03	D	0.88	D	0.83
Ygnacio Valley/Bancroft	E	0.97	E	0.98	E	0.94	E	0.93

SOURCE: Omni-Means, Ltd

<sup>1</sup> With JMMC Expansion Increment 5, La Casa Via would no longer connect directly to Ygnacio Valley Road. The new project intersection would be Ygnacio Valley/Medical Center Way.

Table 19

MITIGATED YGNACIO VALLEY ROAD ARTERIAL LOS: JMMC BUILDOUT (EXPANSION INCREMENT 5)

Condition	Year 2010 Base Plus Project Expansion Increment 5 (Buildout)					
	Unmitigated			Mitigated		
	Direction/ Peak Hour	Arterial LOS	Avg. Travel Speed	Direction/ Peak Hour	Arterial LOS	Avg. Travel Speed
Future Base with Expansion Increment 5 (project buildout)	Westbound <sup>1</sup> / AM Peak	F	10.2 mph	Westbound <sup>1</sup> / AM Peak	F	10.2 mph
	Eastbound <sup>2</sup> / PM Peak	F	8.30 mph	Eastbound <sup>2</sup> / PM Peak	F	9.50 mph

SOURCE: Omni-Means, Ltd.

<sup>1</sup> In the vicinity of JMMC, "westbound" Ygnacio Valley Road traffic travels in a southwesterly direction.

<sup>2</sup> In the vicinity of JMMC, "eastbound" Ygnacio Valley Road traffic travels in a northeasterly direction.



intersection LOS of D (0.83) during the AM peak hour (a significant improvement) and E (0.98) during the PM peak hour.

- At the intersection of *Ygnacio Valley/Bancroft*, add a separate right-turn lane and striping to create the following eastbound approach lane intersection geometrics: two left-turn lanes, three through lanes, and one right-turn lane. As shown in Table 18, this would result in a buildout intersection LOS of E (0.94) during the AM peak hour (a slight improvement) and E (0.93) during the PM peak hour (slight improvement).

No further feasible intersection mitigation measures have been identified. Even after implementation of the above measures, the project impact on intersection operation would remain an *unavoidable significant adverse impact*.

(2) Expansion Increment 2. (T Impact 2) Same as for *T Impact 1* above. No further feasible intersection mitigation measures have been identified. Even after implementation of the above measures, the project impact on intersection operation would remain an *unavoidable significant adverse impact*.

(3) Expansion Increment 3. (T Impact 3) Same as for *T Impact 1* above. No further feasible intersection mitigation measures have been identified. Even after implementation of the above measures, the project impact on intersection operation would remain an *unavoidable significant adverse impact*.

(4) Expansion Increment 4. (T Impact 4) Same as for *T Impact 1* above. No further feasible intersection mitigation measures have been identified. Even after implementation of the above measures, the project impact on intersection operation would remain an *unavoidable significant adverse impact*.

(5) Expansion Increment 5. (T Impact 5) In addition to the mitigation measures identified for *T Impact 1* above, the following measure is recommended:

- At the reconstructed intersection of *Ygnacio Valley/Medical Center Way* (currently La Casa Via), add a third northbound left-turn lane and striping to create the following northbound approach lane geometrics: two left-turn lanes, one shared left-through lane, and a separate right-turn lane. In addition, add a separate eastbound right-turn lane and a second westbound left-turn lane on Ygnacio Valley Road. Change the signal phasing to a split phase for Medical Center Way-Kinross Drive. As shown in Table 18, these measures would improve intersection LOS to B (0.70) during the AM peak hour (slight improvement) and D (0.87) during the PM peak hour (slight improvement).

No further feasible physical mitigation measures have been identified. Even after implementation of the above measures, the project impact on intersection operation would remain an *unavoidable significant adverse impact*.

**b. Project Arterial Roadway Impacts**

(1) Future Base Case Conditions Without the Project. No significant additional impact identified; no mitigation required.

(2) Future Base Case Plus Expansion Increment 5. (T Impact 6) As shown in Table 19, with implementation of the intersection mitigation measures recommended above for Expansion Increments 1 and 5, arterial LOS for Ygnacio Valley Road would remain at LOS F during both the AM and PM peak periods. During the AM peak hour, the "westbound" (southwest-bound in the vicinity of JMMC) average travel speed would remain unchanged at 10.2 miles per hour. During the PM peak hour, the "eastbound" (northeast-bound in the vicinity of JMMC) average travel speed would slightly improve from a projected 8.3 miles per hour without the proposed intersection mitigation measures to a projected 9.5 miles per hour with the proposed intersection mitigation measures. In addition to the intersection mitigation measures identified above, the following measure is recommended to further minimize arterial LOS impacts:

- Through a voluntary cooperative Development Agreement with the city of Walnut Creek, JMMC shall continue existing TDM efforts to lower the vehicle per employee ratio (VER) of 0.85. Continue to implement existing JMMC TDM efforts as an important Master Plan component, including Master Plan requirement for convenient bus turnouts and bicycle and pedestrian circulation with safe bicycle storage facilities. Continue the guaranteed ride home program, subsidized transit tickets, subsidized vanpools, and cash prize incentives for those employees using a commute alternative or parking off-site. Together with the intersection measures described above, this Master Plan effort would continue to lessen the impact of JMMC-related traffic, including future project-related traffic, on Ygnacio Valley Road.

Other than the intersection mitigations for Expansion Increments 1 and 5 above, no further feasible mitigation measures have been identified; even with continuation of JMMC TDM measures and implementation of the above intersection improvement measures, the project contribution to cumulative arterial roadway operational impacts would remain an *unavoidable significant adverse impact*.

**c. Project Internal Circulation/Access Impacts**

(1) Expansion Increment 5 (Buildout). (T Impact 7) The future design of the Ygnacio Valley Road/Medical Center Way intersection shall align the associated Ygnacio Valley Road crosswalk at a 90 degree angle with Ygnacio Valley Road. This would reduce the crosswalk's "green time" impact on Ygnacio Valley Road to a less than significant level.

(2) Expansion Increment 5 (Buildout). (T Impact 8) To clearly delineate access to and from the Shell Ridge medical office properties southwest of La Casa Via, incorporate a signing and striping plan to improve roadway service to affected properties in the Master Plan

"development units" improvement plan. This would reduce the access impacts to the Shell Ridge medical offices to a less than significant level.

(3) Expansion Increments 1, 2, 3, and 4. (T Impact 9) Existing driveway access to medical offices located on La Casa Via (between Ygnacio Valley and Montego) would remain unchanged with Expansion Increments 1, 2, 3, and 4. With additional traffic generated by this development and the relocation of the Main Campus La Casa Via driveway in Expansion Increment 2, vehicle queues along La Casa Via would lengthen, causing driveway access to worsen. No feasible mitigation measures have been identified to correct this problem and the operational impacts to these medical office driveways would remain an *unavoidable significant adverse impact*.

(4) Emergency Vehicle Access. (T Impact 10) Specify in the Master Plan that the proposed "neighborhood entrance cul-de-sac" (traffic circle) on La Casa Via will have a minimum outside turning radius of 42 feet to accommodate emergency vehicles. In addition, indicate in the Master Plan that this minimum 42-foot radius also applies to the Medical Center Entrance Court on the Main Campus Site as well as to the proposed Medical Center Way traffic circles on the La Casa Court Site. This would reduce potential emergency vehicle access impacts to a less than significant level.

#### d. Project Parking Impacts

Implementation of the following mitigation measures should reduce identified project parking impacts to less than significant levels:

(1) Parking Rate Cap. (T Impact 11) To ensure that adequate parking is available for all phases and components of Master Plan development, require that each application for construction under the Master Plan provide parking commensurate with the findings of a specific *parking demand study* for the proposed development (for city review and approval). The Master Plan shall not impose a maximum parking ratio on the results of specific parking demand studies.

(2) Main Campus Site Parking Access. (T Impact 12) Within the medical center's Main Campus Site, stipulate in the Master Plan that parking lot/structure access points shall be located at a minimum of 100 feet from the Medical Center Way intersections with the new north-south road west of the campus, the medical center entrance court and the new service road. Similarly, stipulate that parking access points on the service road shall be a minimum of 100 feet from that road's intersections with the new north-south road west of the campus, and with Medical Center Way.

(3) La Casa Court and 230 La Casa Via Site Parking Access. (T Impact 13) Revise the Master Plan to: (a) direct parking access for the La Casa Court Site toward the Medical Center Way terminus, with secondary access to and from La Casa Via; and (b) direct parking access for the 230 La Casa Via Site into the "roundabout" formed at the neighborhood



entrance cul-de-sac. Because the roundabout would be a unique roadway feature, stipulate that signing shall be carefully designed to direct outbound motorists around the cul-de-sac and out via La Casa Via.

**e. Local Transit Impacts (T Impact 14)**

**(1) Expansion Increment 5 (Buildout).** Include the following mitigation measures in the Master Plan to reduce the project impacts on local transit service to below the level of significance:

- Require provision of bus turnouts for County Connection lines on La Casa Via east of Montego to serve adjacent JMMC development on the La Casa Court and 230 La Casa Via sites. These turnouts may be incorporated into the planned neighborhood entrance cul-de-sac on La Casa Via adjacent to the La Casa Court and 230 La Casa Via Sites. Discussions with CCCTA planning staff indicate that, although these new stops at this location may increase headway times slightly for the route or routes selected to serve the new stops, the route change would be consistent with CCCTA's goal to adequately serve JMMC facilities. If and when bus service is planned for the La Casa Court and 230 La Casa Via sites, provide the city with a noise study, conducted at the expense of the applicant, regarding the noise impacts of the introduced bus service on adjacent residential and medical uses, including feasible noise mitigation measures if necessary to conform with the *Community Noise Subelement* of the general plan.
- For bus patrons working in the Shell Ridge medical office buildings, provide signage that would indicate the nearest bus stop for specific bus routes in the vicinity. With the displacement of bus stops along La Casa Via, these stops would likely be located at the newly re-figured Montego/La Casa Via intersection or at the new main entrance court on the JMMC campus.

**f. Bicycle and Pedestrian Impacts**

**(1) Expansion Increment 3 Pedestrian Impact. (T Impact 15)** Incorporate the following mitigation stipulations in the Master Plan to reduce pedestrian safety impacts to below the level of significance:

- To reduce the potential for pedestrian/vehicle conflicts, locate the proposed crosswalk on La Casa Via at the La Casa Via/Montego intersection.

**(2) Bicycle Path Circulation. (T Impact 16)** Incorporate the following mitigation stipulations in the Master Plan to reduce bicycle/pedestrian path impacts to below the level of significance:

- The proposed bike path connection from Montego to the Ygnacio Canal Trail shall be aligned along the proposed staff service road dividing the main campus site and the existing Walnut Creek Hospital. Specifically, the bike path connection shall be placed in or adjacent to the landscaped buffer along the eastern edge of the Main Campus Site.

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## D. EMPLOYMENT AND HOUSING

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This section describes (1) pertinent current trends in employment and housing in Walnut Creek and Contra Costa County, including the local ratio between housing and jobs; (2) the potential impacts of the John Muir Medical Center Master Plan project on these trends; and (3) any measures necessary to mitigate significant adverse employment and housing effects.

### 1. SETTING

#### a. Local Employment Characteristics

(1) Contra Costa County. The Association of Bay Area Governments (ABAG) estimates that there were approximately 303,830 jobs in Contra Costa County in 1990, and approximately 298,420 jobs in the county in 1995 (see Table 19). Of the 1995 total, approximately 54 percent (162,150 jobs) were in retail and other services; 21 percent (61,360 jobs) were in manufacturing, wholesale trade, and construction; nine percent (27,190 jobs) were in finance, insurance, and real estate; seven percent (20,650 jobs) were in transportation, communication, and utilities; eight percent (23,820 jobs) were in government; and the remaining one percent (3,250 jobs) were in agriculture and mining.<sup>1</sup>

(2) City of Walnut Creek. ABAG estimates that there were approximately 53,590 jobs in Walnut Creek in 1990, representing 18 percent of the countywide total, and approximately 50,270 jobs in 1995, accounting for about 17 percent of the countywide total (see Table 19).<sup>2</sup>

According to the 1990 Census, the largest employment sectors in the city were services (36.4 percent), retail trade (15.9 percent), and finance, insurance, and real estate (15.4 percent).<sup>3</sup>

The two largest employers in the city are currently the John Muir Medical Center and the Kaiser Permanente Medical Center, which combine to provide approximately 3,000 jobs,<sup>4</sup> or about six percent of the city's total jobs.

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<sup>1</sup> Association of Bay Area Governments (ABAG), Projections 96, December 1995, page 133.

<sup>2</sup> Ibid, page 151.

<sup>3</sup> City of Walnut Creek, 1989 General Plan, Housing Element, July 1994, page 3-42.

<sup>4</sup> City of Walnut Creek, 1989 General Plan, Housing Element, July 1994, page 3-43. Estimate is as of 1992.

Table 19

JOBS/HOUSING RATIOS--BAY REGION, CONTRA COSTA COUNTY, AND WALNUT CREEK

	<u>1990</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>	<u>2010</u>	<u>2015</u>
<i>Bay Area<sup>1</sup></i>						
Total households	2,245,867	2,338,560	2,465,070	2,606,090	2,725,710	2,830,450
Total jobs	3,073,000	3,028,290	3,298,800	3,585,640	3,826,520	4,021,780
Total employed residents	3,151,942	3,125,900	3,410,800	3,656,800	3,815,700	3,939,600
Ratio (jobs per employed resident)	0.98	0.97	0.97	0.98	1.03	1.02
<i>Contra Costa County</i>						
Total households	300,288	321,920	349,830	378,900	405,690	430,610
Total jobs	303,830	298,420	335,800	373,700	412,940	446,140
Total employed residents	409,351	418,700	474,400	518,400	557,000	585,300
Ratio (jobs per employed resident)	0.74	0.71	0.71	0.72	0.74	0.76
<i>Walnut Creek</i>						
Total households	33,465	34,590	35,560	36,740	38,070	39,570
Total jobs	53,590	50,270	50,720	52,460	57,860	62,460
Total employed residents	38,154	39,400	40,200	40,400	43,800	47,100
Ratio (jobs per employed resident)	1.41	1.28	1.26	1.30	1.32	1.33

SOURCE: Association of Bay Area Governments, Projections 96, December 1995; and Wagstaff and Associates.

<sup>1</sup>The term *Bay Area* refers to the nine-county San Francisco Bay Region, encompassing Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties.



(3) Existing John Muir Medical Center. The existing John Muir Medical Center complex in Walnut Creek currently employs approximately 1,525 people.<sup>1</sup> In addition, there are an estimated five employees at the existing medical offices located at 185 La Casa Via (on the "La Casa Court Site").<sup>2</sup>

#### **b. Local Housing Characteristics**

Table 19 and the following discussion describe ABAG household estimates and growth projections for Contra Costa County and the city of Walnut Creek. The discussion refers to "households," since ABAG's Projections 96 pertains to households, not dwelling units. The terms "households" and "dwelling units," as defined by ABAG, are similar but not equivalent; a "household" is defined as an occupied dwelling unit.

(1) Contra Costa County. ABAG estimates that there were approximately 300,288 households in Contra Costa County in 1990 and approximately 321,920 households in 1995 (see Table 19). ABAG projects that there will be 349,830 households countywide by 2000, an increase of approximately nine percent over the five-year period. By 2015, ABAG anticipates that the county will contain 430,610 households, a 23-percent increase between 2000 and 2015.

(2) City of Walnut Creek. ABAG estimates that there were approximately 33,465 households in Walnut Creek in 1990 and approximately 34,590 households in 1995. By 2000, the total is expected to increase by approximately three percent to 35,560. By 2015, ABAG projects that Walnut Creek will contain 39,570 households, an 11-percent increase between 2000 and 2015 (see Table 19).

(3) Project Site. The project site contains one housing unit, a single-family house on a large lot located at the end of La Casa Court (the "Schulze Property").

#### **c. Jobs/Housing Relationships**

The term "jobs/housing ratio" is commonly used to describe the relationship between the number of local jobs available and the number of local employed residents. To the degree that a balance is achieved between the number of local jobs and the number of local employed residents, there is a greater opportunity for local residents to work close to where

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<sup>1</sup>Letter to Sandra Meyer, Associate Planner, City of Walnut Creek Community Development Department, from David R. Thistlethwaite, AIA, Principal, Thistlethwaite Architectural Group, re. "Medical Center Staffing," December 3, 1995. The number of employees cited includes both full- and part-time staff.

<sup>2</sup>Transmittal from Brian O'Driscoll, Thistlethwaite Architectural Group, to Drummond Buckley, Wagstaff and Associates, re. "Wagstaff - Request for Information - Dated January 4, 1996," January 5, 1996.

they live. A "jobs/housing ratio" which is substantially higher or lower than the regional average indicates a relatively high level of incommuting or outcommuting, and therefore tends to reduce a community's contribution to regional traffic congestion, noise, and air pollution.

Table 19 illustrates the jobs/housing ratio trend for Walnut Creek in comparison to the county and region as a whole. The table indicates that, in 1995, the county as a whole had substantially more employed residents than jobs, while Walnut Creek had substantially more jobs than employed residents. In Walnut Creek, there were an estimated 50,270 local jobs and 39,400 employed residents in 1995, or 1.28 jobs per employed resident. This 1995 Walnut Creek jobs-per-employed-resident ratio represents an improvement over the 1990 ratio, estimated at 1.41 jobs per employed resident, but suggests that a disproportionately high number of people who are employed in Walnut Creek commute from outside the city to their jobs in Walnut Creek.

ABAG projects that the Walnut Creek's jobs/housing ratio will eventually increase again between now and the year 2015, when there will be 62,460 jobs and 47,100 employed residents in Walnut Creek, or 1.33 jobs per employed resident. Based on this projection, Walnut Creek may experience a corresponding slight increase in commute traffic into the city, along with associated traffic congestion, by 2015.

(In considering the implications of these jobs/housing ratio figures, it is important to note that a simple numerical balance in the ratio does not necessarily indicate that local residents will have the opportunity to work in their community. Other factors, such as the match between local residents' skills and the skills required for local jobs, also influence a community's actual jobs/housing ratio.)

## 2. IMPACTS

### a. Significance Criteria

This EIR evaluates the significance of project employment and housing impacts based on criteria described in Section 15382 and Appendices G and I of the CEQA Guidelines.<sup>1</sup> Section 15382 states the following general rule regarding the treatment of economic or social effects in EIRs: *"Significant effect on the environment means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic and social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant."*

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<sup>1</sup>State Office of Planning and Research, CEQA Guidelines, Section 15382; Appendix G, Items k and m; and Appendix I, Items II(a) through (c), 1995.

Appendices G and I of the CEQA Guidelines contain specific criteria for evaluating environmental effects. With regard to population (and, by extension, employment and housing impacts), a project would normally have a *significant effect* on the environment if it would:

1. Cumulatively exceed official regional or local population projections (Appendix I, Item II(a)).
2. Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure (Appendix G, Item k, and Appendix I, Item II(b))). In Walnut Creek, "substantial growth" in the commercial sector may be defined as development that would cause citywide commercial growth to exceed the following limitations established by the city's 1989 General Plan: (a) 150,000 square feet every two years from 1993 to 2003, and (b) 750,000 square feet over the period from 1993 to 2003. "Commercial growth" includes retail and office space, but does not include Community Facilities such as hospitals, which are exempted from the square footage allocation limits.<sup>1</sup> "Substantial growth" in the residential sector may be defined as development that would cause citywide residential growth to exceed 2,550 dwelling units between 1993 and 2003.<sup>2</sup> Any growth may be considered "substantial" if it exceeds the projections of the Association of Bay Area Governments (ABAG).
3. Displace a large number of people or displace existing housing, especially affordable housing (Appendix G, Item m, and Appendix I, Item II(c)).

In addition, based on goals and policies of the City of Walnut Creek General Plan,<sup>3</sup> a project may be considered to have a *significant impact* if it would:

4. Create or contribute substantially to an existing jobs/housing imbalance (if ABAG employment projections for Walnut Creek are exceeded as a result of the project).

This EIR uses these criteria to evaluate whether the project would have a significant impact on employment or housing conditions in Walnut Creek or elsewhere in Contra Costa County.

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<sup>1</sup>City of Walnut Creek, 1989 General Plan, Community Development Element, Growth Limitation Subelement, Policies 6 and 11, pages 2-77 through 2-79.

<sup>2</sup>City of Walnut Creek, 1989 General Plan, Community Development Element, Growth Limitation Subelement, Policies 6-8, page 2-77.

<sup>3</sup>Goal 1 of the Growth Limitation Subelement of the City of Walnut Creek 1989 General Plan, Community Development Element (page 2-75), is "to balance growth with infrastructure capacity and consideration for open space conservation, the need to balance jobs and housing and Walnut Creek's long term ability to finance a full spectrum of high quality community services."



## **b. Impacts on Employment**

(1) Primary Project Impacts. As discussed in section III of this EIR, it is not possible to estimate precisely the number of additional employees associated with the John Muir Medical Center expansion, since the proposed Master Plan would permit a wide range of medical and ancillary uses and provides for flexible land use guidelines in order to meet unforeseen future needs in the health care industry. General employee estimates may be derived from the existing ratio of employees to building square footage, however. Based on the existing total of 1,525 employees in the existing 365,000-square-foot medical center (representing 0.004 employee per square foot), the proposed 833,000-square-foot expansion could be expected to accommodate approximately 3,332 new employees at buildout, which would occur over a 20-year period (833,000 square feet x 0.004 employee/square foot = 3,332 employees).

This employment increase would be offset by the loss of approximately five existing jobs on the project site due to displacement of existing medical offices located at 185 La Casa Via (on the "La Casa Court Site"). The project could therefore be expected to produce a net employment increase of *approximately 3,327 jobs* (3,332 jobs created - 5 jobs lost = 3,327 net jobs). This total would represent:

- approximately 5.3 percent of Walnut Creek's projected job total in 2015 (62,460 jobs, as shown in Table 19), and 27.3 percent of the 12,190-job increase projected by ABAG for Walnut Creek between 1995 and 2015 (see Table 19).
- an addition of approximately 62 percent to the 5,357 new jobs anticipated in Walnut Creek during the period 1993-2016, based on the commercial growth limitations of the city's 1989 General Plan. In accordance with these limitations (which are described above under "a. Significance Criteria," Criterion 2), 2,328 new jobs are anticipated in Walnut Creek through the year 2003.<sup>1</sup> This total represents a growth rate of 233 jobs per year over the ten-year period from 1993 to 2003. Extrapolating this same growth rate would give the city a total of approximately 5,357 new jobs by 2016, when the proposed JMMC Master Plan is expected to be built out. The 5,357-job total does not include the 3,327 new jobs associated with the Master Plan, because the city's *Growth Limitation Subelement* does not consider hospitals "commercial" projects and exempts hospitals from the square foot allocation requirement. Therefore, conservatively assuming for the sake of this EIR that the maximum growth rate allowed by the existing commercial growth limitations is not increased after 2003, a total of 8,684 new jobs would be anticipated in Walnut Creek by 2016 (the 5,357 new jobs allowed by the existing commercial growth limitations assumed for the year 2016, plus the 3,327 new jobs allowed by the JMMC Master Plan). This projected 8,684-job total would not exceed ABAG's projection for the total number of new jobs in the city by the year 2015 (12,190 jobs).

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<sup>1</sup>City of Walnut Creek, 1989 General Plan, Housing Element, July 1994, pages 3-43 through 3-44.

(2) Jobs-Housing Ratio. Because the jobs per employed resident ratio in Walnut Creek would not be expected to exceed the ABAG projection of 1.33 as a result of the project (see Table 19), the project's employment effect on the city's jobs-housing ratio would be considered less than significant.

However, it is important to note that, although the net employment increase associated with the project would not be considered a significant impact by itself, it would contribute to potentially significant traffic, public services, noise, air quality, and other environmental impacts that are described in other corresponding sections of this EIR.

(3) Secondary Project Impacts. The project-related direct (net) increase of approximately 3,327 jobs could also have an economic "multiplier" effect, generating additional employment increases in other local business, medical support, and personal services (e.g., restaurants, retail services) in response to new demands generated by the expanded medical center.

The total employment impact of this type of project, including both primary and secondary job generation, typically ranges from 1.5 to 2.5 times the direct jobs generated. Assuming that some of this secondary employment impact will occur in surrounding areas outside the Walnut Creek city limits, the lower end of this employment multiplier range would probably be more indicative of the project's total employment effect on the city. Using the lower end of the multiplier range, the project could be expected to generate a total of approximately 5,000 total new jobs in Walnut Creek ( $3,327 \text{ jobs} \times 1.5 = 4,990 \text{ jobs}$ ). The secondary component of this total would be approximately 1,700 jobs ( $4,990 - 3,327 = 1,663$ ).

The estimated secondary employment increase potential of roughly 1,700 additional jobs would be dependent in part on the development of new commercial square footage, a factor that would be subject to the city's commercial growth limitations. Since the estimated secondary employment increase total does not exceed the 5,357-job increase projected for the city by the year 2016 (as extrapolated from commercial growth limitations for the year 2003), the increase would represent a less-than-significant impact (see Criteria 2 and 4 under "a. Significance Criteria" above).

(4) Cumulative Impacts. In addition to the proposed project, other potentially job-producing projects in Walnut Creek that were under review, approved, or under construction as of June 21, 1995 consisted of the following:

- Retail development: 15,325 square feet (gross floor area) under construction, which, according to city staff, is anticipated to result in 34 new employees.
- Other commercial development (including auto service, commercial recreation facilities, religious assembly places, and clubs and lodges): 10,000 square feet (gross floor area) under review and 12,290 square feet (gross floor area) approved, which, according to city staff, is anticipated to result in a total of 81 new employees.

- Hospital development: Kaiser Medical Center Phase III hospital expansion (144 beds) under review, which, according to city staff, is expected to result in 215 new employees.
- Skilled nursing and rest homes: 120 beds and 56 rooms, which, according to city staff, is anticipated to result in a total of 342 new employees.<sup>1</sup>

Based on the city's anticipated employment figures, these projects are projected to result in a total of 557 additional medical employees,<sup>2</sup> which, when combined with the 5,357 new jobs allowed by the existing commercial growth limitations and the 3,327 new jobs allowed by the Master Plan, results in a total of 9,356 new employees. This cumulative employment would not exceed the total number of new Walnut Creek jobs projected by ABAG for 2015 (12,190 jobs), and would therefore represent a less than significant impact (see subsection a, "Significant Criteria" above).

### **c. Demand for Additional Housing**

The project-generated primary and secondary local job growth could in turn be expected to produce an increase in demand for housing in central Contra Costa County, including the Walnut Creek area. This increase in demand would contribute to existing and anticipated cumulative housing shortages in the region. Assuming that 30 percent of the new employees would settle in Walnut Creek,<sup>3</sup> and that each household in Walnut Creek contains an average of 1.14 employees,<sup>4</sup> the project at buildout would generate the need for approximately 875 additional housing units in the city (3,327 new employees x 30 percent = 998 employees living in Walnut Creek; 998 employees divided by 1.14 employees/household = 875 households, or housing units). Assuming that the remaining 70 percent of new employees would settle elsewhere in Contra Costa County, and that each household in the county contains an average of 1.30 employees,<sup>5</sup> the project at buildout would also generate the need for approximately 1,800 housing units elsewhere in the county (3,327 new employees x 70 percent = 2,329 employees living elsewhere in Contra Costa County; 2,329 employees divided by 1.30 employees/household = 1,791 households, or housing units).

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<sup>1</sup>Sandra Meyer, Associate Planner, personal communication.

<sup>2</sup>Non-medical employees have not been included in this calculation because these jobs, which would be subject to the city's commercial growth limitations, are included in the 5,357-job figure for the year 2016.

<sup>3</sup>City of Walnut Creek, 1989 General Plan, Housing Element (July 1994), page 3-45.

<sup>4</sup>Based on ABAG's Projections 96: 39,400 employed residents divided by 34,590 households = 1.14 employed residents per household in Walnut Creek in 1995.

<sup>5</sup>Based on ABAG's Projections 96: 418,700 employed residents divided by 321,920 households = 1.30 employed residents per household in Contra Costa County in 1995.



The 1989 General Plan Housing Element (July 1994) identified 1,621 vacant housing units in the city of Walnut Creek, representing a housing vacancy rate of 5.4 percent, higher than the "ideal vacancy rate" of 3.3 percent defined by the State Department of Housing and Community Development.

Project-related increases in local housing demand could be expected to contribute to a tighter housing market in Walnut Creek in which vacancy rates become lower than the ideal rate established by the State Department of Housing and Community Development, generating a demand for new housing construction in the city. However, the project-related Walnut Creek housing demand would not be expected to induce growth pressures that would exceed the city's 1989 General Plan residential development limitation of 2,550 dwelling units between 1993 and 2003 (see Criterion 2 under "a. Significance Criteria" above), particularly since the project would be built out over a 20-year period. The increased housing demand from project primary and secondary employment growth would therefore not represent a significant impact on the city or countywide housing stock.

### **3. MITIGATIONS**

#### **a. Impacts on Employment**

(1) Primary Employment Impacts. No significant primary employment growth impact has been identified; no mitigation measures are required.

(2) Jobs-Housing Ratio. No significant jobs-housing ratio impact has been identified; no mitigation measures are required.

(3) Secondary Employment Impacts. No significant adverse secondary employment impact has been identified; no mitigation measures are required.

(4) Cumulative Employment Impacts. No significant adverse cumulative employment impact has been identified; no mitigation measures are required.

#### **b. Demand for Additional Housing**

No significant adverse impacts have been identified; no mitigation measures are required.



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## E. PUBLIC SERVICES AND UTILITIES

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This section describes the setting, project impacts, and necessary mitigation measures relating to public facilities and services, including fire protection, police services, special wastewater needs, water service, solid waste collection services, and parks and recreation.

### 1. SIGNIFICANCE CRITERIA

The project would be considered in this EIR to have a *significant adverse impact* on public services if it would:

- a. Result in a need for new systems, or substantial alterations to services or utilities, including water, sewer, fire protection, police, schools, parks or recreational facilities, solid waste disposal, or other governmental services;<sup>1</sup>
- b. Result in a public service condition that is inconsistent with pertinent adopted policies and programs contained in the City of Walnut Creek 1989 General Plan;
- c. Exceed the City of Walnut Creek 1989 General Plan Community Development Element, Growth Limitation Subelement fire service "run time" goal of three minutes or less, 90 percent of the time;<sup>2</sup>
- d. Exceed the City of Walnut Creek 1989 General Plan Community Development Element, Growth Limitation Subelement police service response time standard of three to five minutes for emergency calls and 20 minutes for other calls 95 percent of the time;<sup>3</sup>
- e. Extend a sewer trunk line with capacity to serve new development;<sup>4</sup>

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<sup>1</sup>CEQA Guidelines, Appendix I, Items XI(a) through (e) and Items XII(c), (d), and (g). It was determined during the initial study phase that this project does not have the potential for significant adverse impacts on schools. For a discussion of this issue, see section XI.C of the John Muir Medical Center Master Plan Initial Study, which is included as an appendix to this report.

<sup>2</sup>City of Walnut Creek 1989 General Plan, Growth Limitation Subelement, page 2-100.

<sup>3</sup>Ibid.

<sup>4</sup>CEQA Guidelines, Appendix G, Item s.



- f. Increase the demand for neighborhood or regional parks or other recreational facilities, or affect existing recreational opportunities;<sup>1</sup> or
- g. Reduce the city's ability to meet the local park acreage standard of 5 acres per 1,000 residents established by the City of Walnut Creek 1989 General Plan Community Development Element, Growth Limitation Subelement.<sup>2</sup>

## 2. FIRE PROTECTION SERVICES

### a. Setting

Fire protection and emergency medical services are provided to Walnut Creek and the JMMC vicinity by the Contra Costa County Fire Protection District (CCCFPD). The district's governing body is the Contra Costa County Board of Supervisors.

The CCCFPD serves central and western Contra Costa County (185 square miles) and maintains 30 fire stations. Five stations are located in the Walnut Creek vicinity.<sup>3</sup>

(1) Fire Protection. All CCCFPD stations in the Walnut Creek area maintain a full-time (around-the-clock) engine company of three fire fighters; some stations in the city also have a four-member ladder truck company. The stations with ladder trucks in Walnut Creek are on Civic Drive downtown and on Treat Boulevard at Oak Grove Road. A typical commercial fire call involves two engine companies and one ladder truck company with a battalion chief.<sup>4</sup>

*Closest Stations.* The main response station for the project site is Station 1, located at 1330 Civic Drive in downtown Walnut Creek, approximately 1.4 miles from the project subareas. The run time to the project subareas from Station 1 is approximately three minutes. Station 1 includes two fire engines, a ladder truck, and six around-the-clock personnel.

In addition, Stations 7 and 10 could respond to an emergency at JMMC. Station 7 is located at 1050 Walnut Avenue and includes one fire engine, one breeding support unit (for air support), and three around-the-clock personnel. Station 10, located at 2955 Treat Boulevard in the city of Concord, includes two fire trucks, a ladder truck, and six around-the-clock personnel.

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<sup>1</sup>CEQA Guidelines, Appendix I, Items XV(a) and (b).

<sup>2</sup>City of Walnut Creek 1989 General Plan, Growth Limitation Subelement, page 2-101.

<sup>3</sup>City of Walnut Creek 1989 General Plan, Growth Limitation Subelement, p. 2-110; telephone conversation with Rick Ryan, Fire Inspector, CCCFPD, November 16, 1995.

<sup>4</sup>Ibid.

*Response Time.* The emergency response process can be broken down into the following time frames: reflex time is the time measured from the exact instant the emergency starts to the time that the engine arrives on the scene and initiates action; response time is measured from when the alarm is processed to the time the engine company is notified (45 seconds on average); run time is measured from the time the engine leaves the station to the time it arrives on the scene. The *Growth Limitation Subelement* of the city's 1989 General Plan Community Development Element specifies a minimum run time goal of three minutes or less, 90 percent of the time.<sup>1</sup> With the three-minute run time to the project site from Station 1, plus one minute to prepare to leave the station and one minute to set up near the fire, it takes five minutes for fire fighters to begin fighting a fire.

*Hydrants.* Six fire hydrants are currently located on the Main Campus Site. An additional fire hydrant exists at the sidewalk in front of the 230 La Casa Via Site. The static water pressure for these hydrants ranges from 75 pounds per square inch (psi) to 95 psi, which is sufficient to meet minimum fire flow requirement of 3,000 gallons per minute (gpm) for the medical center.<sup>2</sup>

*Insurance Rating.* The CCCFPD currently maintains a "Class 3" National Insurance Service Office (ISO) fire insurance rating on a scale of one to ten where one is the most desirable.<sup>3</sup>

*Special Building Code Requirements.* The Uniform Building Code (UBC) requires sprinklers and smoke evacuation systems in tall buildings to allow rescue within the buildings.

(2) Paramedic Services. Studies show that approximately 65 percent of all city emergency calls are for medical emergencies.<sup>4</sup> City response time goals for paramedic services are the same as for fire protection. Although every CCCFPD fire station employs emergency medical technicians, paramedic services are provided in the city on a county-contract basis by private, local ambulance services. Every medical emergency response includes at least one ambulance. In mid-1996, the CCCFPD plans to begin providing in-house paramedic response services at some stations.

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<sup>1</sup>Hospitals are excluded from the performance standard requirements in the *Growth Limitation Subelement*. However, the minimum standards contained in this section may be utilized for determining CEQA thresholds of significance.

<sup>2</sup>Ryan.

<sup>3</sup>Ryan.

<sup>4</sup>Walnut Creek General Plan Amendment FEIR, January 1993, p. 163.

## **b. Impacts**

(1) Project Impacts on Fire Protection Services. Assuming that structures built under the proposed Master Plan comply as required with UBC and with National Fire Protection Association standards, the CCCFPD does not anticipate that the project itself (expansion of the existing medical center) would adversely affect local fire protection services. No significant increase in emergency "run times" to the project subareas or to the other uses in the vicinity is expected due to project-related traffic increases or due to the proposed reconfiguration of onsite roadways.<sup>1</sup>

Based on existing water pressure characteristics in the vicinity, the CCCFPD does not anticipate problems in meeting medical complex fire flow requirements as a result of the Master Plan expansion.

(2) Project Impacts on Paramedic Services. The hospital includes an existing emergency room to handle medical emergencies onsite. The Master Plan anticipates possible improvements and expansions to the JMMC emergency medical (trauma center) component. Such improvements would have a beneficial impact on emergency medical services. The Master Plan expansions are not be expected to have a significant adverse impact on local or regional abilities to provide paramedic services.<sup>2</sup>

(3) Cumulative Impacts. In addition to the project reviewed in this EIR, the following other new developments are currently under construction, approved and pending construction, or under review by the city of Walnut Creek: (1) 97 single-family and 44 multiple-family residential units; (2) 15,325 square feet of retail development; (3) 22,290 square feet of "other" types of development, including uses such as auto service, schools, churches, recreational facilities, and clubs and lodges; and (4) a 133-bed hospital, a 120-bed skilled nursing facility, and a 56-room rest home.<sup>3</sup> The JMMC Master Plan proposes an additional 833,000 square feet of hospital and hospital-related uses. The CCCFPD does not anticipate service problems as a result of this cumulative development.

## **c. Mitigations**

(1) Mitigation for Project Impacts on Fire Protection Services. No significant impacts have been identified; no mitigation is required.

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<sup>1</sup>Telephone conversation with Rick Ryan, Fire Inspector, CCCFPD, February 12, 1996.

<sup>2</sup>Ibid.

<sup>3</sup>City of Walnut Creek, "Summary of Pipeline Projects List as of June 21, 1995." Floor area totals may include existing floor area which is being rehabilitated, and do not include a subsection for existing floor area that is to be demolished.



(2) Mitigation for Project Impacts on Paramedic Services. No significant impacts have been identified; no mitigation is required.

(3) Mitigation for Cumulative Impacts. No significant impacts have been identified; no mitigation is required.

### **3. POLICE SERVICES**

#### **a. Setting**

(1) Walnut Creek Police Department. The City of Walnut Creek Police Department (WCPD) provides police protection to areas within the Walnut Creek city limits. Presently, the WCPD headquarters is located at the Walnut Creek City Hall, approximately two miles from the project subareas via Ygnacio Valley Road.

*Department Staffing.* The WCPD operates under the direction of a police chief and two captains. The current staff consists of 78 sworn and 31 non-sworn (including clerical) personnel, for a total of 109 staff people.<sup>1</sup> The current ratio of sworn police officers per 1,000 population is 1.24 (i.e., 1.24 officers per 1,000 people), based on an estimated city population of 62,859 people.<sup>2</sup>

*Response Time.* The *Growth Limitation Subelement* of the city's 1989 General Plan Community Development Element specifies a minimum response time of three to five minutes for emergency calls and twenty minutes for other calls 95 percent of the time.<sup>3</sup> The project subareas are located in designated police patrol Sector 3, which is assigned two patrol cars on an around-the-clock basis.

Between 9:30 PM and 2:30 AM on Fridays and Saturdays, the number of active-duty officers in the city is doubled and additional service capacity is possible for every sector in the city.

Response time to the hospital generally conforms to the city's overall response time goals. Most current police service calls to the hospital involve emergency room calls in which the injury is believed to be the result of a criminal act.<sup>4</sup>

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<sup>1</sup>City of Walnut Creek Police Department, Long Range Plan, May 1995, page II-7.

<sup>2</sup>Ibid., page II-7.

<sup>3</sup>City of Walnut Creek, 1989 General Plan, Community Development Element, *Growth Limitation Subelement*, page 2-100.

<sup>4</sup>Telephone conversation with Dennis Bell, Lieutenant, City of Walnut Creek Police Department, November 16, 1995.

(2) Contra Costa County Sheriff's Department. The unincorporated portion of the La Casa Via neighborhood, including the 230 La Casa Via Site, is currently under the jurisdiction of the Contra Costa County Sheriff's Department's Valley Station in Alamo. The La Casa Via neighborhood is located in the department's Beat 11, a service area covering unincorporated lands east of I-680, west of Mt. Diablo, south of Rudgear Road, and north of Monument Boulevard. Beat 11 is patrolled by one patrol car around-the-clock.<sup>1</sup> The Sheriff's Department also maintains a mutual aid agreement with the city of Walnut Creek.

(3) Private Security Services. In addition to the available city police services, JMMC maintains a private security force for its existing facility. This service is currently provided on a contract basis by American Protective Services, which staffs the hospital with the following shifts:

7:00 AM - 3:30 PM:	2 security guards
3:30 PM - 11:00 PM:	3 security guards
11:00 PM - 7:00 AM:	3 security guards

The guards patrol the hospital grounds, including the parking lot, on foot. After about 3:00 AM, a security guard is permanently stationed at the emergency entrance, which is the only open point of entry to the facility at that hour.<sup>2</sup>

## **b. Impacts**

(1) Project Impacts on Police Services. The project applicant anticipates that JMMC use of a private, onsite security service would expand commensurate with the Master Plan-guided hospital expansion, and may eventually include use of private patrol vehicles if the La Casa Court and 230 La Casa Via Sites are developed.<sup>3</sup>

Assuming that JMMC maintains the approximate level of private security service per square foot provided at the existing facility, the WCPD does not anticipate that the proposed Master Plan expansions would adversely affect the department's level of service. The existing sworn-officer-to-population ratio would not be directly affected by the project. The Walnut Creek Police Department currently stations staff in the vicinity of Ygnacio Valley Road both east and west of the project site. While the project would generate additional traffic on Ygnacio Valley

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<sup>1</sup>Telephone conversation with Tom Coggan, Valley Station Commander, Contra Costa County Sheriff's Department, November 17, 1995.

<sup>2</sup>FAX transmittal from Brian O'Driscoll, Thistlethwaite Architectural Group, to Drummond Buckley, Wagstaff and Associates, December 22, 1995; and telephone conversation with Brian O'Driscoll, December 21, 1995.

<sup>3</sup>Telephone conversation with Brian O'Driscoll, Thistlethwaite Architectural Group, December 21, 1995.

Road, the Police Department does not anticipate that this relative increase would cause the WCPD response times to the project site and environs to exceed the response time goals of the City of Walnut Creek 1989 General Plan, Community Development Element, Growth Limitation Subelement (three to five minutes for emergency calls and 20 minutes for other calls 95 percent of the time). The Police Department also does not anticipate that the Master Plan-proposed circulation system (under the Acquisition or Nonacquisition options) would cause response times to the project site or surrounding properties to increase by a significant level.<sup>1</sup>

(2) Cumulative Impacts on Police Service. Other new development currently under construction, approved and pending construction, by the city is described above under Fire Protection and Emergency Medical Services. The WCPD does not anticipate service problems resulting from the combination of the Master Plan-proposed JMMC expansions and this other cumulative development pending in the city.<sup>2</sup>

(3) Impacts on Sheriff's Department. The project proposes annexation of the 230 La Casa Via Site to the city of Walnut Creek. Assuming the annexation is approved, police jurisdiction for this property would shift from the Contra Costa County Sheriff's Department to the Walnut Creek Police Department. This change would not be expected to have a significant adverse impact on Sheriff's Department services.

#### **c. Mitigations**

(1) Mitigation for Project Impacts on Police Service. No significant impacts have been identified; no mitigation is necessary.

(2) Mitigation for Cumulative Impacts on Police Service. No significant impacts have been identified; no mitigation is necessary.

### **4. SEWER SERVICE**

#### **a. Setting**

(1) Citywide Sewage Collection and Treatment. The Central Contra Costa Sanitary District (CCCSD) provides wastewater collection and treatment services to city residents and businesses. The CCCSD is a special district with its own board of directors who are elected

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<sup>1</sup>Telephone conversations with Dave Johnson, Lieutenant, City of Walnut Creek Police Department, February 16, 1996, and March 20, 1996.

<sup>2</sup>Telephone conversation with Dennis Bell, Lieutenant, City of Walnut Creek Police Department, November 16, 1995.



by residents of the service area. The CCCSD serves the entire Central County area from Martinez to parts of San Ramon, and from Moraga to Clayton.

In 1985, according to the city's general plan, 85 percent of the effluent in the district was generated by residential sources, twelve percent by commercial sources and three percent by industrial sources. The average flow generation was 75 gallons per capita per day.<sup>1</sup>

Wastewater treatment is provided by one central plant located near the intersection of Interstate 680 and Highway 4 in Martinez. Holding ponds at the facility have a capacity of 170 million gallons. The Regional Water Quality Control Board sets maximum limits for the volume of sewage that can be treated during the "average dry flow period" (defined as the three driest months of the year). The average dry flow limit set for the CCCSD Martinez plant currently set at 45 million gallons per day (mgd), which the CCCSD anticipates will be adequate for the 1997-2000 period based on historical connection increase rates to the CCCSD's collection system.<sup>2</sup> The "wet flow period" limit is set at 75 mgd to account for increased flows during winter months (sometimes reading 220 mgd).

The actual average dry weather flow treatment rate is 33.6 mgd based upon the past three years' data.<sup>3</sup> The waste treatment plant, which discharges effluent at a point directly off the Martinez bay front in the middle of the channel off Suisun Bay, has never experienced a rate of peak wet weather flow that required discharge of untreated effluent.<sup>4</sup>

(2) Sewer Service in Project Site Vicinity. Existing sewer lines in the project site vicinity include an eight-inch diameter main in Ygnacio Valley Road and eight- to ten-inch mains in La Casa Via, the John Muir Medical Center parking lot, and Los Cerros Avenue. Subareas of the project site are served as follows:<sup>5</sup>

- The Main Campus Site is served by an eight-inch main that links to the ten-inch main in the medical center parking lot on the southeast side of the hospital, which extends to the Los Cerros Avenue main.

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<sup>1</sup>City of Walnut Creek 1989 General Plan, *Growth Limitation Subelement*, page 2-107.

<sup>2</sup>Letter from Russell Leavitt, AICP, Planning Assistant, Central Contra Costa Sanitary District, to City of Walnut Creek Community Development Department (Attn. Sandra Meyer, AICP), re. "Development Review, WO 0724, John Muir Medical Center Master Plan," December 14, 1995, page 3.

<sup>3</sup>Ibid.

<sup>4</sup>City of Walnut Creek, Walnut Creek General Plan Amendment FEIR, page 159.

<sup>5</sup>Telephone conversation with Russell Leavitt, Planning Assistant, Central Contra Costa Sanitary District, November 8, 1995.

- The La Casa Court Site is served by an eight-inch main in La Casa Court, which connects to the main in Los Cerros Avenue.
- The 230 La Casa Via Site is served by the eight-inch main in La Casa Via.
- The Schulze Property has sewer main access at two points, one at the terminus of the existing eight-inch main at the end of La Casa Court, and one at the westernmost corner of the parcel via an eight-inch sewer line that extends along the Contra Costa Canal.

Sewer lines extending under private property from existing buildings to sewer mains located in public rights-of-way are privately owned and maintained.<sup>1</sup>

(3) Sewage Generation Rates. According to CCCSD staff, typical sewage generation rates for health care-related uses range from 138 gallons per day per 1,000 square feet of building area (for medical office uses) to 625 gallons per day per 1,000 square feet of building area (for hospital uses).<sup>2</sup>

#### **b. Impacts**

(1) Project Impacts. The project would increase demands on the CCCSD's sewage collection and treatment system. Based on the typical sewage generation rate for hospital uses, the additional approximately 833,000 square feet of medical floor area allowed by the proposed Master Plan would generate a total of approximately 520,625 additional gallons per day of wastewater at buildout (cumulative wastewater generation increases in the District are described below).

*Treatment Needs*. Based on the current maximum CCCSD sewage treatment capacity versus current sewage demands, the district's existing sewage treatment system would be able to accommodate the flow increase associated with the project.<sup>3</sup>

However, the project may also generate the need for special source control measures to prevent hazardous wastes or other materials from entering the sewage collection system. The current medical center complex already includes such measures and systems to meet the district's discharge requirements. Additional measures needed over the course of Master Plan buildout may include installation of additional grease removal devices and establishment of: (a) appropriate waste sampling procedures, (b) appropriate rules for laboratory operations, and

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<sup>1</sup>Telephone conversation with Russell Leavitt, Planning Assistant, Central Contra Costa Sanitary District, December 15, 1995.

<sup>2</sup>Ibid.

<sup>3</sup>Letter from Russell Leavitt, AICP, Planning Assistant, Central Contra Costa Sanitary District, to City of Walnut Creek Community Development Department (Attn. Sandra Meyer, AICP), re. "Development Review, WO 0724, John Muir Medical Center Master Plan," December 14, 1995, page 2.

(c) periodic operations inspection requirements.<sup>1</sup> These project special control needs would constitute a *potentially significant impact (PSU Impact 1)* (see Criterion a under "1. Significance Criteria" above). (Hazardous materials impacts are also addressed in section IV.G, Health and Safety, of this EIR.)

*Collection Needs.* The project may require extension of the existing sewage collection system in the project site vicinity. This need would represent a *potentially significant adverse impact (PSU Impact 2)* (see Criteria a and e under "1. Significance Criteria" above).

(2) Cumulative Impacts. CCCSD staff have determined that, under "ultimate" conditions (i.e., with anticipated buildout under city's general plan and with ongoing deterioration of sewer pipelines), CCCSD facilities will not have adequate flow-carrying capacity to meet the district's current design criteria, which require CCCSD facilities to withstand the "20-year sewer event." The CCCSD *Capital Improvement Plan* outlines the necessary improvements to meet the design criteria. It is anticipated that these and other improvements required to serve new development are funded by applicable CCCSD fees and charges levied on developers at the time of connection to the sewer system.<sup>2</sup> As a result, the proposed project would not be expected to contribute to a significant adverse cumulative impact on the CCCSD sewage collection and/or treatment system.

### c. Mitigations

(1) Special Treatment Impacts. *(PSU Impact 1)* As mitigation for possible impacts due to project-related hazardous wastes or other materials infiltrating the sewage collection system, require the applicant for any hospital, clinical, congregate care, medical office or other future floor area expansions under the proposed Master Plan to comply with the CCCSD's Source Control Ordinance. (Mitigations for other hazardous materials impacts are identified in section IV.G, Health and Safety, of this EIR.) This measure would reduce project-related impacts on the sewage collection and treatment system to a less-than-significant level.

(2) Collection System Impacts. *(PSU Impact 2)* As mitigation for any Master Plan related extension of the existing sewage collection system, require the project applicant to comply with:

- (a) The CCCSD's "Standard Specifications" for design of the on-site sewage collection system;

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<sup>1</sup>Telephone conversation with Russell Leavitt, Planning Assistant, Central Contra Costa Sanitary District, December 15, 1995.

<sup>2</sup>Letter from Russell Leavitt, AICP, Planning Assistant, Central Contra Costa Sanitary District, to City of Walnut Creek Community Development Department (Attn. Sandra Meyer, AICP), re. "Development Review, WO 0724, John Muir Medical Center Master Plan," December 14, 1995, page 2.



- (b) The CCCSD's Hillside and Creek Area Sewer Policy, which addresses design procedures for collection systems in hillsides or unstable areas; and
  - (c) All applicable CCCSD connection fees and charges.
- (3) Mitigation for Cumulative Impacts. No significant project-related cumulative sewer service impact has been identified; no mitigation is required.

## 5. WATER SERVICE

### a. Setting

(1) Citywide Water Supply. Water is supplied to Walnut Creek through two separate water districts. The East Bay Municipal Utility District (EBMUD) serves about two-thirds of the city, including the project subareas and vicinity. EBMUD also serves the cities and unincorporated areas of western and southern Contra Costa County, as well as areas of northern Alameda County. The Contra Costa Water District (CCWD) serves primarily the northern and eastern portions of Walnut Creek. Contra Costa Water District also serves parts of the northern and eastern sections of the County.<sup>1</sup> Although the CCWD does not serve the project area, its needs are discussed in this EIR in relationship to its facilities (storage) plans, which involve a portion of the project site.

*East Bay Municipal Utility District.* The principal EBMUD source of water is the Mokelumne River, which feeds the Pardee and Camanche reservoirs. The Pardee reservoir has a holding capacity of 68.4 billion gallons; Camanche has a holding capacity of 140.4 billion gallons. Water from these reservoirs travels approximately 85 miles through the Mokelumne Aqueduct pipelines to EBMUD's Walnut Creek filter plant, which processes up to 80 million gallons per day (mgd) and has a maximum treatment capacity of 350 mgd. From here, the supply system continues westerly to other storage plants servicing the rest of the district.

*Contra Costa Water District.* The principal source of CCWD water are the Delta intakes at Rock Slough and Mallard Slough off the Pittsburg bayfront. Water is stored in Mallard Reservoir in north Concord. The holding capacity at this facility is approximately one billion gallons. The reservoir water is treated and pumped to various reservoirs around the district. Three of these reservoirs are located in the Walnut Creek area. All three of these local reservoirs are enclosed reinforced concrete structures. Their total storage capacity is approximately 6.0 million gallons for a Walnut Creek subarea serving approximately 20,000 people.

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<sup>1</sup>City of Walnut Creek, 1989 General Plan, pp. 2-102 to 2-103.

CCWD has 7,148 treated-water connections in Walnut Creek. The average daily consumption for these connections totals 2.4 million gallons. Seventy percent of the water is consumed by residential sources, 15 percent by commercial sources, and 5 percent by other sources. Residential consumption for the portion of the Walnut Creek area within the CCWD service area was approximately 245 gallons per day per dwelling unit from September 1991 through August 1992.<sup>1</sup>

(2) Water Service in the Project Site Vicinity. The project site is located within the EBMUD's Leland Pressure Zone (elevation 50 to 250 feet). Water service to the Main Campus Site is provided through a four-inch meter and eight-inch fire service on a 16-inch water main beneath Ygnacio Valley Road, and a four-inch meter on a six-inch water main beneath Los Cerros Avenue. The La Casa Court, 230 La Casa Via, and Schulze Property sites are served by a six-inch water main beneath La Casa Court and an eight-inch main beneath La Casa Via.<sup>2</sup>

In addition to domestic water service it receives from these EBMUD facilities, JMMC maintains an on-site well that has historically provided some of the water needed for landscape irrigation. The well has been used for irrigation purposes only, and is not currently in use.<sup>3</sup>

(4) Existing Water Use. The existing 365,000-square-foot John Muir Medical Center complex currently uses an estimated total of 74,904 gallons of water per day from EBMUD. Of this total, approximately 64 percent is devoted to domestic use, 13 percent to processing, 12 percent to irrigation, and 11 percent to cooling systems.<sup>4</sup>

(5) Possible CCWD Reservoir Construction on 230 La Casa Via Site. The Contra Costa Water District (CCWD) is currently evaluating the possibility of installing an underground treated water reservoir on the 230 La Casa Via Site to serve the Walnut Creek portion of the CCWD service area. CCWD estimates that the reservoir would be a 4 million gallon (mg) facility with an outside diameter of 150 to 175 feet. If reservoir construction were to occur on the site, the surface directly above the reservoir could not be covered with buildings (because of the weight of the buildings and the need to preserve access to the reservoir). However, the

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<sup>1</sup>City of Walnut Creek, 1989 General Plan, p. 2-103.

<sup>2</sup>Telephone conversation with Dana Giese, New Business Representative, East Bay Municipal Utility District, November 8, 1995.

<sup>3</sup>Transmittals from Brian O'Driscoll, Thistlethwaite Architectural Group, to Drummond Buckley, Wagstaff and Associates, re. "Request for Information," December 1, 1995 and December 22, 1995.

<sup>4</sup>Ibid.

area above the reservoir could be used to accommodate landscaping, open courts, and pedestrian ways, as well as parking and driveways.<sup>1</sup>

The CCWD has been working with the JMMC to evaluate this potential use of the 230 La Casa Via Site. CCWD anticipates that an environmental document addressing alternative sites for the reservoir, including the 230 La Casa Via Site, will be completed in early to mid-1996, followed by preparation of pre-design and design (construction level) plans. If this site is selected, reservoir construction would be anticipated by early 1998.<sup>2</sup>

## **b. Impacts**

(1) Project EBMUD Impacts. The project would increase demands for municipal water service. The added water demand from the project would depend on the types of new uses constructed over the life of the Master Plan. Based on the existing medical center daily demand rate of 0.21 gallon of water per square foot of building area, the 833,000 square feet of additional medical uses that would be permitted by the proposed Master Plan could require a total of approximately 174,930 additional gallons per day of treated water.

EBMUD expects to be able to accommodate the project-related water demand increases over the next 20 years, and therefore the project would not be expected to have a significant impact on water service.<sup>3</sup> The need for project-related water system improvements would be evaluated on a case-by-case basis at the time that the medical center submits individual, future applications to the city for development of specific new medical center components permitted by the Master Plan. It is possible that demand increases could be accommodated using the existing water distribution system in the vicinity. However, if expansion and/or relocation of the existing system was to become necessary for a particular future expansion component, EBMUD would determine what system improvements would be required based on the related application for new water service which would have to be submitted by the project sponsor to the EBMUD New Business Office.

Figure 34 illustrates EBMUD's preliminary analysis of onsite water service facilities that may need to be modified (expanded and/or relocated) to accommodate the Master Plan. Any such future facility improvements would be required to be designed and constructed in accordance with EBMUD and Contra Costa County Fire Protection District (CCCYPD) standards. Design

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<sup>1</sup>Letter from Dennis Pisila, Senior Planner, Contra Costa Water District, to Sandra Meyer, City of Walnut Creek Community Development Department, re. "John Muir Medical Center Campus Master Plan Application and Relationship to CCWD Treated Water Reservoir Planning," November 20, 1995.

<sup>2</sup>Ibid.

<sup>3</sup>74,904 gallons per day (existing water use) divided by 365,000 square feet (existing building square footage) = 0.21 gallon per square foot per day.



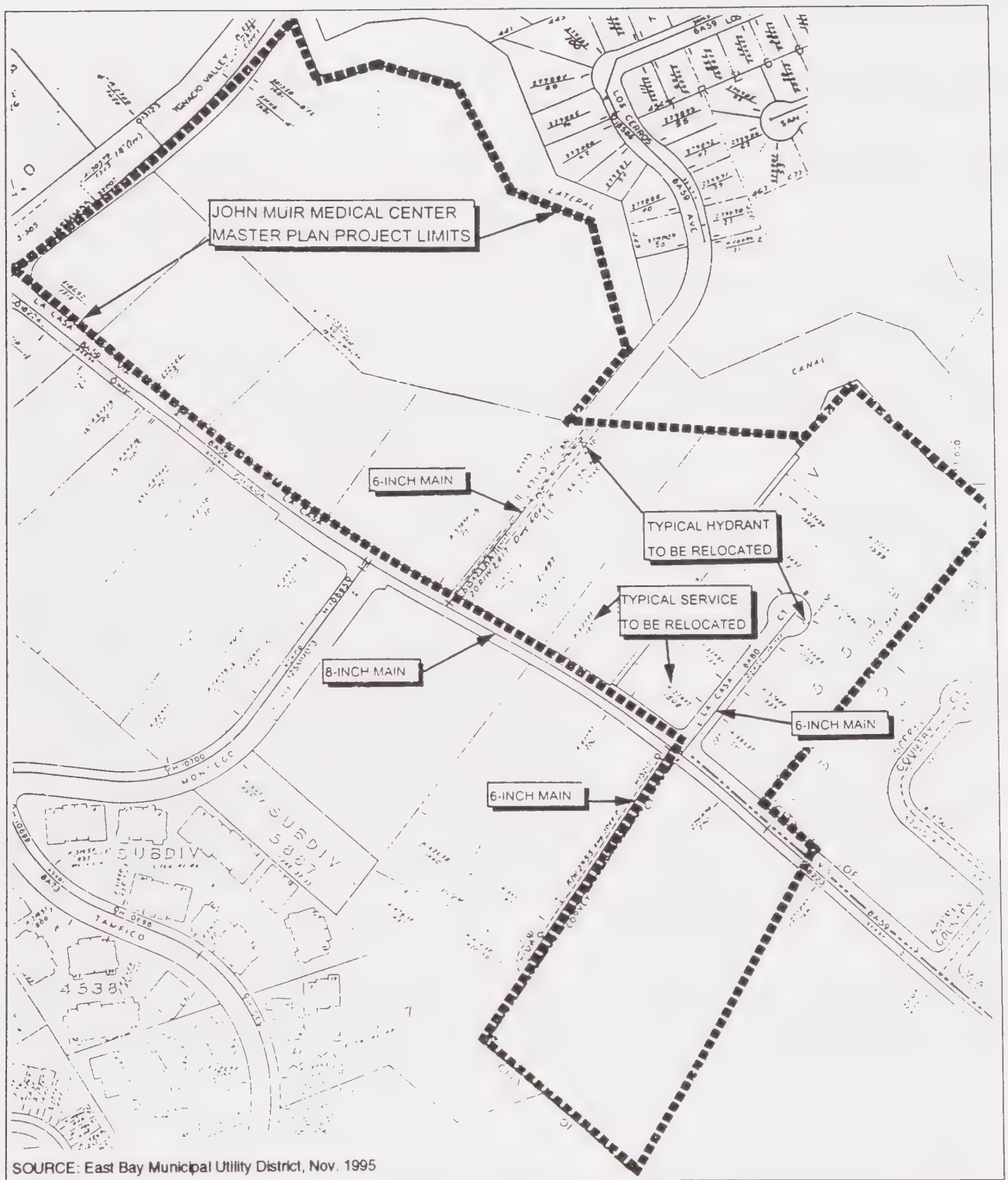


Figure 34  
**POTENTIAL ONSITE EBMUD  
 WATER FACILITY RELOCATIONS**

of the improvements may also need to consider possible fluctuations in water pressure at the project site due to its location at the far end of the Leland Pressure Zone.<sup>1</sup>

(2) Project CCWD Impacts. Depending on development plans for the 230 La Casa Via Site, buildout of this portion of the Master Plan project has the potential to prevent the Contra Costa Water District from locating an underground water reservoir on the 230 La Casa Via Site. As noted in the "Setting" section above, the 230 La Casa Via Site is one of the alternative sites under consideration as a location for this CCWD facility. The potential effect of the project on these plans represents a *potentially significant impact*. The CCWD's inability to locate a reservoir on this site could affect water service within the district's Walnut Creek service area (**PSU Impact 3**) (see Criterion a under "1. Significance Criteria" above).

(3) Cumulative Impacts. EBMUD expects to be able to provide water service to anticipated cumulative new development in Walnut Creek.<sup>2</sup> No significant impacts on water service are anticipated from cumulative development.

### **c. Mitigations**

(1) Project EBMUD Impacts. No significant EBMUD water service impacts have been identified; no mitigation is required.

However, the applicant may wish to consider incorporating water conservation policies into the Master Plan (e.g., landscaping standards encouraging drought-tolerant landscaping and drip irrigation systems).

(2) Project CCWD Impacts. (**PSU Impact 3**) To mitigate the potential impact on CCWD's underground water reservoir planning, require the project applicant to work with CCWD and vice versa to resolve whether the 230 La Casa Via Site is to be the selected new reservoir site alternative. If the 230 La Casa Via Site is chosen, revise the proposed Master Plan to accommodate the reservoir and avoid associated land use and other incompatibilities.<sup>3</sup> This measure would reduce the impact to an insignificant level.

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<sup>1</sup>Telephone conversation with Jose Rios, Associate Civil Engineer, East Bay Municipal Utility District, December 14, 1995.

<sup>2</sup>Telephone conversation with Jose Rios, Associate Civil Engineer, East Bay Municipal Utility District (EBMUD), December 14, 1995.

<sup>3</sup>The environmental impacts of constructing the reservoir at the 230 La Casa Via Site are not evaluated in this EIR. The Contra Costa Water District anticipates that an environmental document addressing alternative sites for the reservoir, including the 230 La Casa Via Site, will be completed in early to mid-1996.

(3) Mitigation for Cumulative Impacts. No significant impacts have been identified; no mitigation is required.

## 6. SOLID WASTE COLLECTION SERVICES

### a. Setting

(1) Existing Onsite Waste Generation. Table 20 shows the amount of waste generated by the existing 365,000-square-foot John Muir Medical Center (Main Campus Site) by type over a recent four-year period (1991 through 1994). The table indicates that average annual waste generation over this four-year period was approximately 1.64 million pounds, or about 819 tons. This annual waste generation rate translates to 4.5 pounds per square foot of building area.

(2) Solid Waste Collection and Disposal. The non-hazardous and non-medical solid waste currently generated by the medical center is disposed of onsite in a 20-cubic-yard waste compactor. The compactor is serviced twice a week. Some of the hazardous and medical waste is disposed of onsite using a Sanipak compactor, which sterilizes and compacts the waste, allowing it to be handled and transported safely along with other wastes generated at the facility.<sup>1</sup> Most hazardous waste is disposed separately from other waste, however. Section IV.G (Health and Safety) of this EIR contains a complete discussion of current medical center hazardous waste disposal practices.

Solid waste collection service for the existing John Muir Medical Center is currently provided by Valley Waste Management, Inc., a private company that serves the area from San Ramon to Walnut Creek. According to the City of Walnut Creek 1989 General Plan, as of 1992 a total of 13,600 Walnut Creek homes were being served by Valley Waste, along with approximately 1,000 commercial accounts and 262 apartment buildings. Since 1994, Valley Waste has transported collected garbage to the Acme transfer station in Martinez; from there the waste has been transported to Altamont.

On March 1, 1996, solid waste collection services in Walnut Creek will be transferred to BFI-Pleasant Hill Bayshore Disposal Inc., located in Pacheco. BFI will serve an area extending from Blackhawk to Walnut Creek. BFI will transfer solid waste from the project site to the

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<sup>1</sup>Telephone conversation with Carol Thompson, Supervisor, Environmental Services, John Muir Medical Center, January 15, 1996.



Table 20

WASTE GENERATED AT JOHN MUIR MEDICAL CENTER, 1991-1994 (IN POUNDS)

	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
<i>Hazardous Waste</i>	13,038	11,734	7,933	9,290
Recycled Waste	38,540	72,560	71,180	86,400
Cardboard Waste	228,000	184,150	72,500	150,480
Medical Waste*	175,514	310,259	193,740	272,550
General Waste**	1,199,317	1,177,770	1,142,400	1,137,603
<b>TOTALS:</b>	<u>1,654,409</u>	<u>1,756,473</u>	<u>1,487,753</u>	<u>1,656,323</u>

SOURCE: John Muir Medical Center, December 1995.

\* Includes chemotherapy and pathological waste

\*\* Does not include recycled items (papers, wood products, and aluminum cans)

Keller Canyon Landfill.<sup>1</sup> It is estimated that the Keller Canyon Landfill will not reach capacity for 35 to 40 years.<sup>2</sup>

(3) Recycling Collection. Two companies, Mt. Diablo Paper Stock and Pacific Rim Recycling, currently collect recyclables at the JMMC facility. Mt. Diablo Paper Stock, based in Concord, currently picks up cardboard bales once a week at the hospital.<sup>3</sup> Pacific Rim Recycling, based in Benicia, currently picks up an average of one 40-yard bin (9 tons) of construction debris (e.g., sheet rock, roofing material) each month.<sup>4</sup>

#### **b. Impacts**

(1) Project Impacts. The amount of additional solid waste that would be generated by the 20-year expansion project is difficult to estimate because of the wide range of uses allowed under the proposed Master Plan. Assuming that new uses would generate waste at the same rate as the current facility (i.e., approximately 4.5 pounds per square foot of building area), the 833,000 square feet of new floor area permitted by the project would generate an additional 3,748,500 pounds (approximately 1,900 tons) of solid waste per year. None of the collection companies serving the site (Valley Waste Management, BFI-Pleasant Hill Bayshore Disposal, Mt. Diablo Paper Stock, Pacific Rim Recycling) anticipate that the project would adversely affect waste collection services in the city.<sup>5</sup> The project's effect on waste collection services is therefore expected to represent a less than significant impact (see Criterion a under "1. Significance Criteria" above).

Section IV.G (Health and Safety) of this EIR addresses the hazardous waste disposal impacts associated with the project.

(2) Cumulative Impacts. The level of cumulative development anticipated in Walnut Creek is described earlier in this chapter under Fire Protection and Emergency Medical Services. None of the collection companies serving this area (Valley Waste Management, BFI-Pleasant Hill Bayshore Disposal, Mt. Diablo Paper Stock, Pacific Rim Recycling) anticipate that this level of cumulative development would adversely affect waste collection services in the city.

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<sup>1</sup>Telephone conversation with Dave Arendt, Operations Manager, BFI--Pleasant Hill Bayshore Disposal, Inc., November 16, 1995.

<sup>2</sup>City of Walnut Creek, 1989 General Plan, p. 2-108.

<sup>3</sup>Telephone conversation with Jo Ann Story, Secretary, Mt. Diablo Paper Stock, December 28, 1995.

<sup>4</sup>Telephone conversation with Deserie Jones, Secretary to the Vice President, Pacific Rim Recycling, December 28, 1995.

<sup>5</sup>Arendt, Story, Jones.

The project's contribution to cumulative waste collection service impacts is therefore considered to represent a less than significant impact (see Criterion a under "1. Significance Criteria" above).

### **c. Mitigations**

(1) Mitigation for Project Impacts. No significant impacts have been identified; no mitigations are required.

However, the project applicant may wish to consider instituting an on-site recycling program for recyclables such as office paper.

(2) Mitigation for Cumulative Impacts. No significant cumulative impacts have been identified; no mitigations are required.

## **7. PARKS AND RECREATION**

### **a. Setting**

(1) City Park and Recreation Facilities. Park and recreation facilities and services are provided in Walnut Creek by the city's Public Services Department. Existing Walnut Creek park facilities range from three-acre neighborhood parks to the 100-acre Heather Farm Park north of the project site. The four-acre San Miguel Neighborhood Park is located immediately to the northeast of the Main Campus Site and to the northwest of the La Casa Court Site and Schulze Property (see Figure 35).

The *Parks and Recreation Subelement* of the city's 1989 General Plan Community Resources Element (page 5-36) states that, excluding school recreation areas, city-owned park land totals approximately 340 acres. This translates to an overall ratio of 5.4 acres of parkland per 1,000 city residents, based on the city's 1995 population of 62,859 people. The general-plan-specified minimum standard is 5 acres per 1,000 residents.<sup>1</sup>

(2) Local and Regional Open Space. In addition to municipal park facilities, the city of Walnut Creek encompasses and is bounded by an extensive network of dedicated open space areas, including Alcanes Ridge to the northwest, Sugarloaf Hill to the southwest, Lime Ridge to the northeast, and Shell Ridge cutting through Walnut Creek to the east. The existing open space system in the project vicinity is illustrated on Figure 35. These open space lands are owned and managed through a variety of mechanisms, including: (1) city ownership (2,396 acres according to the 1989 General Plan); (2) East Bay Regional Park

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<sup>1</sup>City of Walnut Creek, 1989 General Plan, Community Development Element, *Growth Limitation Subelement*, page 2-101.





Figure 35  
**EXISTING PARK, OPEN SPACE  
 AND TRAIL FACILITIES**

SOURCE: Wagstaff and Associates. Base from WAC Corporation



District (EBRPD) ownership and management; (3) city-held open space easements; and (4) private ownership.

*Onsite Open Space.* A city-held open space easement exists on the Schulze property component of the Master Plan area. This easement limits use and development of that property to a one-story single-family house, with a limited number of accessory structures (such as a horse corral).

*Adjoining Open Space.* Open space areas adjoining the project site consist of the following (see Figure 35):

- Three privately-owned, city-designated "knolls" (Knolls A, B, and C on Figure 35), located southwest of the 230 La Casa Via Site, that are protected as open space through two city-adopted specific plans: (1) Specific Plan No. 1, adopted in 1970 and amended in 1973, which preserved the three knolls in their natural state; and (2) Specific Plan No. 3, adopted in 1975, which extended the "Knoll C" open space area. The two specific plans prohibit grading and construction on Knolls A and B, and require that any development on Knoll C be subject to site plan review to ensure that "maximum advantage is taken of the existing contours resulting in a minimum of grading."<sup>1</sup>
- The EBRPD-owned western terminus of the Shell Ridge Open Space Area, which abuts the rear of the 230 La Casa Via Site.
- A city-held open space easement immediately east of the Schulze property in the unincorporated Country Subdivision (La Casa Via neighborhood).

(3) Trail Network. Walnut Creek's parks and open space areas are partially linked by an extensive public trail network that also extends to adjoining regional trail systems and recreation areas such as Mt. Diablo State Park. These various trails accommodate pedestrians, bicyclists and/or equestrians, and are either city- or EBRPD-owned and managed.

As shown in Figure 35, the three project site subareas are located adjacent to the intersection of the EBRPD's Briones/Mt. Diablo Trail and the city's Ygnacio Canal Trail, which both can accommodate pedestrians and equestrians. The Briones/Mt. Diablo Trail links the three project sites and bisects the La Casa Court Site.

## **b. Impacts**

(1) Project Impacts. Project impacts on local and regional park, open space, and trail facilities would consist of the following:

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<sup>1</sup>City of Walnut Creek, City Council Resolution No. 2949 ("A Resolution Amending Exhibits A and B of Specific Plan No. 1 (formerly Specific Plan Proposal No. 571) (Montego and La Casa Via Area) as Established By Resolution No. 2541"), Exhibit A, Item 4.



*Ygnacio Canal and the Ygnacio Canal Trail at the rear to the Main Campus Site.*



(a) *City Park and Recreation Facilities.* The project would not be expected to have a significant impact on the level of service at existing city-owned park and recreation facilities in the vicinity. The project would not directly result in new city residents and would therefore have no direct effect on the ratio of parkland per 1,000 persons specified in the city's *Growth Limitation Subelement*. The project's effect on city-owned park facilities is therefore considered a less than significant impact (see Criterion g under "1. Significance Criteria" above).

(b) *Local and Regional Open Space.* The project would not be expected to have a significant impact on onsite and surrounding local and regional open space. The project would have no foreseeable effect on the city-held open space easement on the Schulze property, since the proposed Planned Development District (P-D) development standards would require that the property remain in residential use. The building envelopes proposed by the project would not encroach on adjoining offsite open space, including the three knolls protected by city specific plans, the EBRPD-owned portion of the Shell Ridge Open Space, and the city-held open space easement in the Country Subdivision (La Casa Via neighborhood) immediately east of the Schulze property. Project impacts on local and regional open space are therefore considered less than significant (see Criteria a and f under "1. Significance Criteria" above). Please refer to section IV.B, Urban Design and Visual Factors, for discussion of project impacts on onsite and offsite views and visual character.

(c) *Trail Network.* The project proposes to realign the Briones/Mt. Diablo Trail, which currently extends along the west side of the 230 La Casa Via Site and bisects the La Casa Court Site. As shown on Figure 36, the realigned trail would extend along the eastern sides of the 230 La Casa Via and La Casa Court Sites and then west along the southern boundary of the Schulze property to join the Ygnacio Canal Trail. In its initial Master Plan design concept, the project applicant has provided for an eight-foot-wide paved trail, with a landscape buffer and a four-foot-wide unpaved path.<sup>1</sup> The proposed relocation of the Briones/Mt. Diablo Trail is not consistent with city alignment policies for the trail and would represent a *potentially significant adverse impact (PSU Impact 4)* (see Criteria a and f under "1. Significance Criteria" above).

(2) Cumulative Impacts. The level of cumulative development currently under construction, recently approved, or pending approval in the city is described in this chapter under Fire Protection and Emergency Medical Services. The city and EBRPD do not anticipate a project contribution to significant adverse cumulative park, open space, or trail facility impacts. Although the residential component of this cumulative development could adversely affect the ratio of parkland to population, the project reviewed in this report would not directly exacerbate this situation.

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<sup>1</sup>Thistlethwaite Architectural Group and Gagen, McCoy, McMahon & Armstrong, John Muir Medical Center Campus Master Plan Application, Supplement 1, Chapters 10 and 11, December 2, 1995, pages 42 and 50.

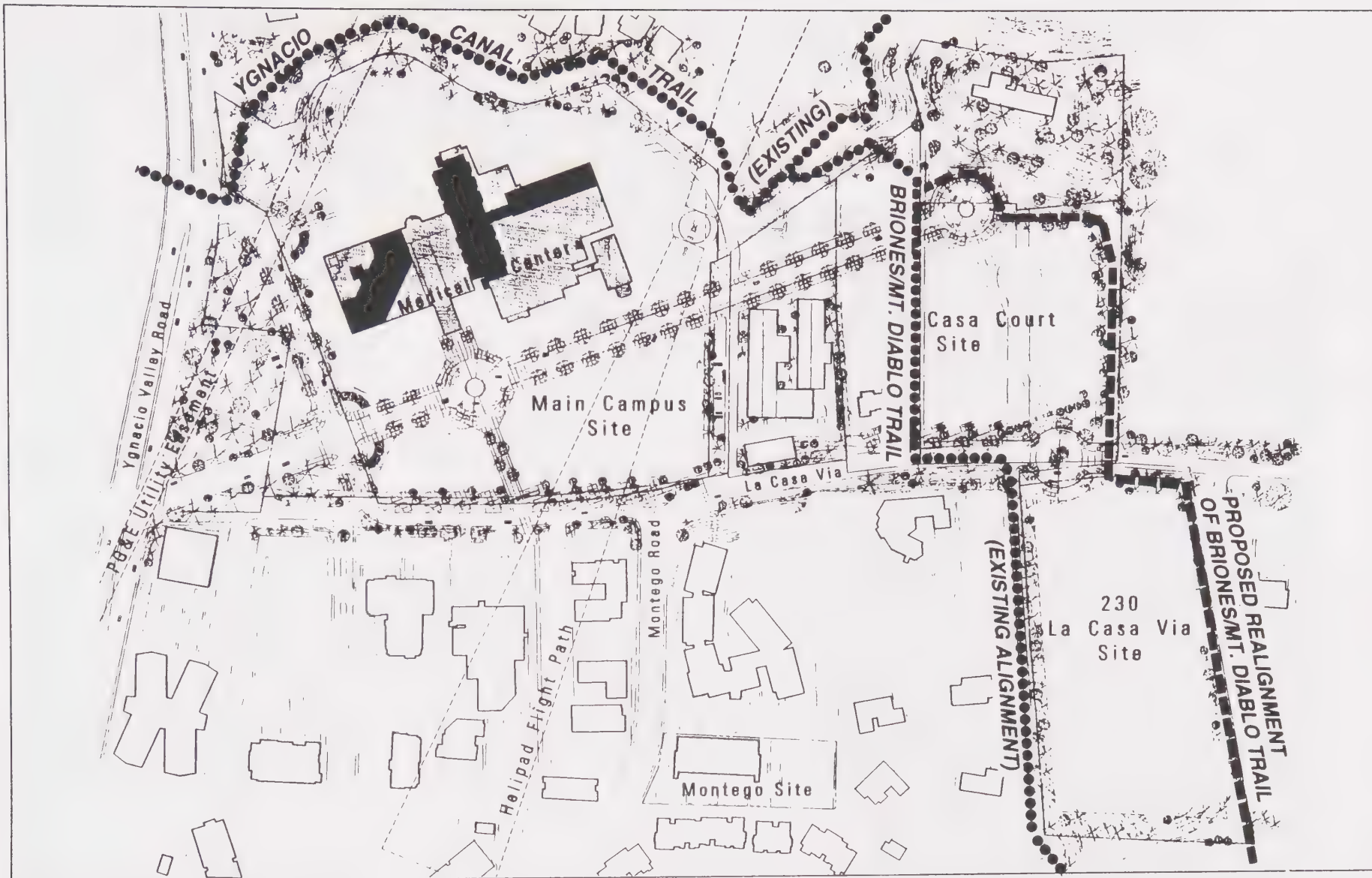


Figure 36  
**PROPOSED TRAIL  
 REALIGNMENT**

SOURCE: Wagstaff and Associates.

### **c. Mitigations**

(1) Project Impacts. No significant impacts on parks and open space have been identified; no mitigations are required.

*Trail Impacts. (PSU Impact 4)* To mitigate potential impacts due to the proposed relocation of the EBRPD's Briones/Mt. Diablo Trail, require the project applicant to:<sup>1</sup>

- Work with the city and EBRPD staff to establish a mutually acceptable trail realignment standard, and incorporate the accepted alignment standard in the Master Plan.
- Work with the EBRPD to establish an appropriate trail width. The current EBRPD standard requires a minimum width of ten feet for multi-use paved trails, with two-foot-wide unpaved shoulders. In order to accommodate equestrian use, however, the EBRPD would prefer a two-foot-wide unpaved shoulder on one side, with a ten-foot-wide paved section and a four- to six-foot-wide unpaved shoulder on the other side.
- Coordinate entry structure and gate placement with EBRPD operations staff.
- Design road and driveway crossings to provide maximum safety for trail users. Treatments may include signs, striping, or other safety features, and design of the trail as a separate facility, rather than as a driveway or access for vehicular traffic.
- Avoid closure of the trail for any length of time, if possible.

These measures would reduce the impact to a less-than-significant level.

(2) Cumulative Impacts. No significant cumulative park, open space, or trail impacts have been identified; no mitigations are required.

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<sup>1</sup>Adapted from letter from Steve Fiala, Trails Specialist, East Bay Regional Park District, to David Thistlethwaite, Thistlethwaite Architectural Group, re. "John Muir Medical Center Project, Briones to Mt. Diablo Trail Realignment," December 19, 1995.





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## F. NOISE

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This EIR chapter describes: (1) the anticipated impacts of the future noise environment on Master Plan permitted land uses; (2) the impacts of project construction phases on ongoing medical center operations; (3) the impacts of future project-generated vehicular and helicopter traffic noise on surrounding land uses; and (4) measures warranted to mitigate any identified significant noise impact potentials.

### 1. SETTING

#### a. Fundamentals of Acoustics

Noise is defined as unwanted sound. The effects of noise can range from interference with sleep, concentration, and communication, to physiological stress, and at higher noise levels, to hearing loss.

Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing. Decibels and other related technical terms are defined in Table 21.

(1) Human Sensitivity to Noise. The method commonly used to quantify environmental noise involves measurement of all frequencies of sound, with an adjustment to reflect the fact that human hearing is less sensitive to low and high frequencies than to midrange frequencies. This measurement adjustment is called "A" weighting. A noise level so measured is called an A-weighted sound level (dBA).<sup>1</sup> Examples of typical A-weighted noise levels in the environment and industry are provided in Table 22.

Environmental noise fluctuates in intensity over time. Therefore, time-averaged noise level computations are typically used to quantify noise levels and determine impacts. The two average noise level descriptors most commonly used are  $L_{dn}$  and CNEL.  $L_{dn}$ , the day/night average noise level, is the 24-hour noise intensity average, with a 10 dBA penalty<sup>1</sup> added for nighttime noise (10:00 PM to 7:00 AM) to account for the greater human sensitivity to noise during this period. CNEL, the community equivalent noise level, is similar to  $L_{dn}$ , but adds a 5 dBA penalty to evening noise (7:00 PM to 10:00 PM).  $L_{02}$ ,  $L_{10}$ ,  $L_{50}$ , and  $L_{90}$  are also commonly

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<sup>1</sup>In practice, the level of a sound source is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighting curve.

Table 21  
DEFINITIONS OF ACOUSTICAL TERMS

<u>Term</u>	<u>Definitions</u>
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals (20 micronewtons per square meter).
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted.
$L_{01}$ , $L_{10}$ , $L_{50}$ , $L_{90}$	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Equivalent Noise Level, $L_{eq}$	The average A-weighted noise level during the measurement period.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 PM to 10:00 PM and after addition of 10 decibels to sound levels in the night between 10:00 PM and 7:00 AM.
Day/Night Noise Level, $L_{dn}$	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 PM and 7:00 AM.
$L_{max}$ , $L_{min}$	The maximum and minimum A-weighted noise level during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Single-Event Noise Exposure Level (SEL)	The sound exposure level of a single noise event (such as an aircraft flyover or a train passby) measured over the time interval between the initial and final times for which the sound level of the single event exceeds the background noise level.

SOURCE: Illingworth & Rodkin, Inc.



Table 22  
TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT AND INDUSTRY

<u>At a Given Distance from Noise Source</u>	<u>A-Weighted Sound Level in Decibels</u>	<u>Noise Environments</u>	<u>Subjective Impression</u>
	140		
Civil Defense Siren (100')	130		
Jet Takeoff (200')	120		Pain Threshold
	110	Rock Music Concert	
Pile Driver (50')	100		Very Loud
Ambulance Siren (100')			
	90	Boiler Room	
Freight Cars (50')		Printing Press Plant	
Pneumatic Drill (50')	80	In Kitchen With Garbage Disposal Running	
Freeway (100')			
	70		Moderately Loud
Vacuum Cleaner (10')	60	Data Processing Center	
		Department Store	
Light Traffic (100')	50	Private Business Office	
Large Transformer (200')			
	40		Quiet
Soft Whisper (5')	30	Quiet Bedroom	
	20	Recording Studio	
	10		Threshold of Hearing
	0		

SOURCE: Illingworth & Rodkin, Inc.

used noise descriptors. They are the A-weighted noise levels equaled or exceeded during one percent, 10 percent, 50 percent, and 90 percent of a specific time period.

One way of anticipating a person's subjective reaction to a new noise is to compare the new noise with the existing noise environment to which the person has become adapted, i.e., the so-called "ambient" noise level. With regard to increases in noise levels, knowledge of the following relationships will be helpful in understanding this EIR section:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived.
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference.
- A change in noise level of at least 5 dBA is required before any noticeable change in community response would be expected.
- A 10 dBA increase is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse change in community response.

#### **b. Noise Compatibility Standards and Guidelines**

(1) City Standards. The John Muir Medical Center Campus is located in the eastern portion of Walnut Creek. Goals and policies contained in the *Community Noise Subelement* of the city's General Plan are used to assess noise implications of city land use decisions and provide an acceptable noise environment for existing and future residents in Walnut Creek. These goals and policies are directed toward the following:

- Ensuring compatibility of new development with existing and future noise environments;;
- Avoiding uses that would increase existing noise levels above acceptable levels; and
- Reducing noise to acceptable levels where it now exceeds those standards.

The following *Community Noise Subelement* policies are particularly applicable to consideration this project:

- Maintain a standard of  $L_{dn}$  60 dB (day/night average noise level) for outdoor noise and  $L_{dn}$  45 dB for indoor noise for all new residential development.
- Protect the noise environment in existing residential areas through the following:
  1. A quantitative noise ordinance.
  2. Evaluation of mitigation measures for projects that would generate noise which could cause a significant adverse community response.
- Strive to reduce traffic noise levels in existing residential areas.

The City of Walnut Creek *Community Noise Subelement* also includes a set of *noise and land uses compatibility guidelines* for various land uses. The noise implications of proposed land

use decisions are assessed against these guidelines. A summary interpretation of the city's current adopted noise compatibility guidelines is shown in Table 23.

### **c. Existing Noise Environment**

(1) Noise Sources. The *Community Noise Subelement* of the city's *General Plan* recognizes traffic on Ygnacio Valley Road and the emergency helipad at the John Muir Medical Center as two major noise sources in Walnut Creek. Existing noise levels at the project site are generated primarily by traffic on Ygnacio Valley Road, traffic accessing the hospital using La Casa Via, ventilation fan noise from the hospital, and occasional noise from sirens, helicopter landings, and maintenance activities.

(2) Noise-Sensitive Land Uses. The project area consists of the existing medical center campus (comprised of the medical center buildings and parking lot), the Walnut Creek Hospital, the undeveloped La Casa Court and 230 Via La Casa sites, the Shell Ridge medical office buildings, the senior housing complex on the opposite side of La Casa Via, and the single-family house on the Schulze Property. Several office building complexes border the campus to the west and southwest. Noise-sensitive receptors near the John Muir Medical Center include the following:

- Walnut Creek Hospital;
- residences bordering the north portion of the campus in the San Miguel Neighborhood;
- residences in the La Casa Via Neighborhood that border the east; and
- senior housing, the American Baptist Church, and residences at the Corvey Court properties, all located to the south of the medical campus.

(3) Noise Measurement Locations. For EIR purposes, 24-hour noise monitoring has been conducted in and around the Main Campus Site at three locations. Short-term noise measurements have also been made at two locations. Figure 37 shows the locations of these noise measurements in relationship to the medical center campus and surrounding sensitive land uses. The noise monitoring was conducted over a two-day period on December 6 and 8, 1995. Results of the noise measurements are summarized in Table 24. Measured long-term noise level fluctuations are shown graphically in Figure 39. During the monitoring period, four helicopter flights (both inbound and outbound) occurred. The monitored noise level effects of these helicopter operations are indicated on Figure 39.

(4) Noise Measurement Results. The results of the long-term noise measurements depicted in Table 24 and Figure 39 are as follows:



Table 23

WALNUT CREEK LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

LAND USE CATEGORY	EXTERIOR NOISE EXPOSURE $L_{dn}$ OR CNEL, dB					
	55	60	65	70	75	80
Residential, Hotels, and Motels						
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds						
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches						
Office Buildings, Business Commercial, and Professional						
Auditoriums, Concert Halls, Amphitheaters						
Industrial, Manufacturing, Utilities, and Agriculture						

**LEGEND**



***Normally Acceptable***

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal convention construction, without any special insulation requirements.



***Conditionally Acceptable***

Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in the design.



***Unacceptable***

New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

SOURCE: Illingworth & Rodkin, Inc.

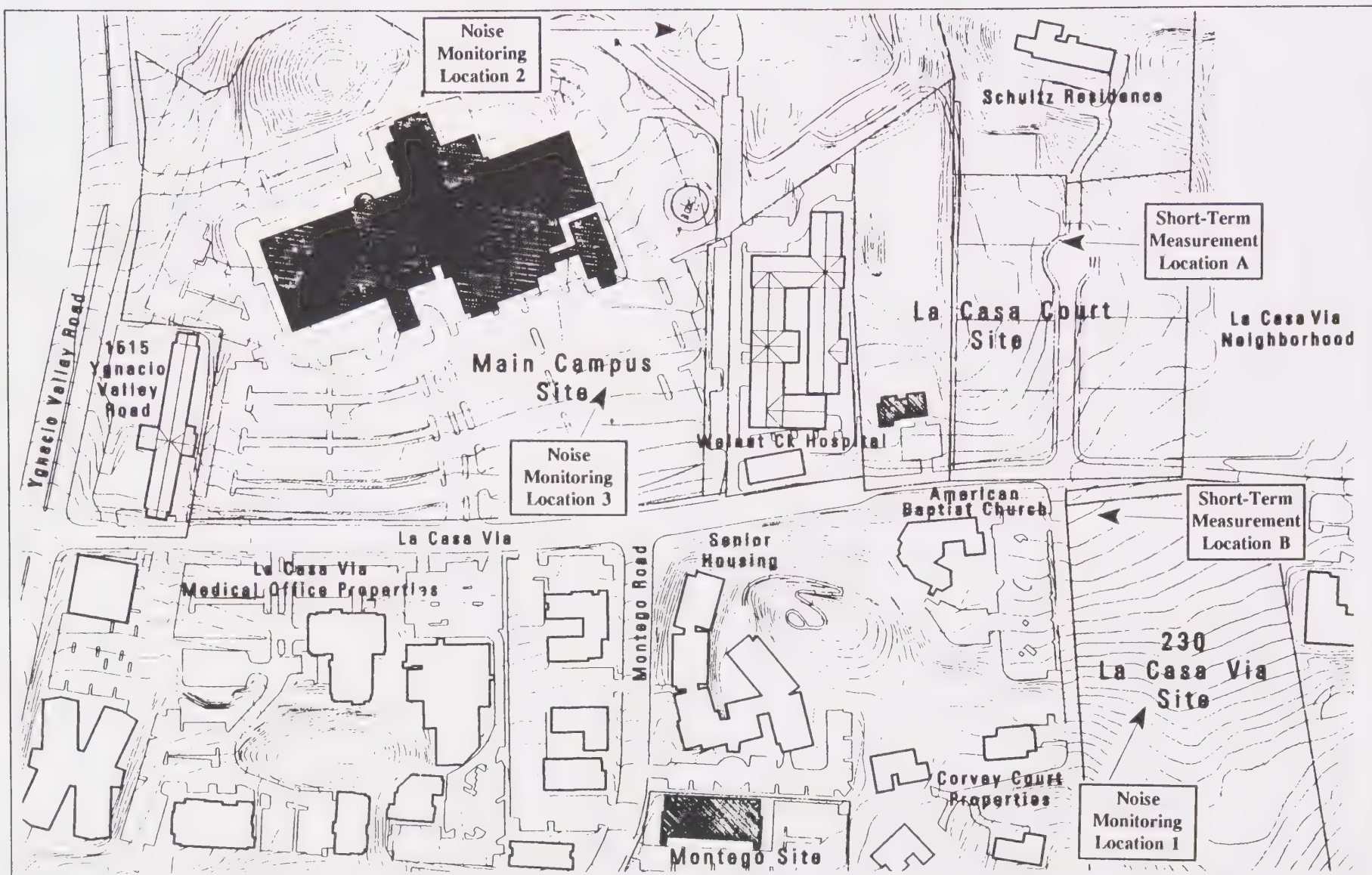


Figure 37  
**NOISE MONITORING  
 LOCATIONS**

SOURCE: Illingworth and Rodkin, Inc.

Table 24

SUMMARY OF NOISE MEASUREMENTS: JOHN MUIR MEDICAL CENTER, DECEMBER 6 AND 8, 1995

<u>Location</u>	<u>Time</u>	<u>Duration</u>	Noise Level, <u>dBA L<sub>eq</sub></u>	<u>Comments</u>
1	2:00 PM 12/6/95	47 hours	58 40	50 dBA L <sub>dn</sub> w/o helicopter flights 52 dBA L <sub>dn</sub> w/4 helicopter flights Loudest hour Quietest hour
2	2:00 PM 12/6/95	47 hours	67 42	61 dBA L <sub>dn</sub> w/o helicopter flights 55 dBA L <sub>dn</sub> w/4 helicopter flights Loudest hour Quietest hour
3	3:00 PM 12/6/95	47 hours	70 47	66 dBA L <sub>dn</sub> w/o helicopter flights 60 dBA L <sub>dn</sub> w/4 helicopter flights Loudest hour Quietest hour
A	2:26 PM 12/8/95	15 minutes	46	Traffic and hospital are dominant noise sources
B	2:47 PM 12/8/95	15 minutes	50	Traffic on La Casa Via is the dominant source

SOURCE: Illingworth & Rodkin, Inc.



*Location 1 - 230 La Casa Via Site.* Noise levels monitored at this location represent the existing noise exposure on the 230 La Casa Via Site as well as at noise-sensitive uses to the southwest of the existing medical center (Corvey Court Properties)<sup>1</sup>. The primary existing sources of noise at this location were a combination of traffic on Ygnacio Valley Road, local traffic, and fan noise from the hospital. The representative day/night noise level measured was 50 dBA  $L_{dn}$  when the noise from helicopter operations was excluded. During the day that the helicopter flights occurred, the day/night noise level was 52 dBA  $L_{dn}$ . Hourly noise levels ranged from 40 dBA to 58 dBA.

*Location 2 - San Miguel Neighborhood.* This noise monitoring location represents existing noise levels along the northwest edge of medical center where residences in the San Miguel neighborhood are exposed to noise generated by the hospital building and by helicopter operations.<sup>2</sup> The representative day/night noise level measured here was 55 dBA  $L_{dn}$  when the noise from helicopter operations was excluded. During the day that the helicopter flights occurred, the day/night noise level was 61 dBA  $L_{dn}$ . Hourly noise levels ranged from 42 dBA to 67 dBA.

*Location 3 - Main Campus Site Parking Lot.* This parking lot noise monitoring location represents existing noise levels near the Walnut Creek Hospital, beneath the helicopter flight path, and near the proposed alignment of Medical Center Way.<sup>3</sup> The primary noise sources at this location were noise from vehicle activity in the parking lot, fan noise from the main medical center building, traffic on La Casa Via and Ygnacio Valley Road, and helicopter flyovers. The representative day/night noise level measured was 60 dBA  $L_{dn}$  when the noise from helicopter operations was excluded. During the day that the helicopter flights occurred, the day/night noise level was 66 dBA  $L_{dn}$ . Hourly noise levels ranged from 47 dBA to 70 dBA.

(2) Short-Term Noise Measurements. For comparison with the long-term noise measurements, short-term noise measurements were made at two additional locations of concern: the La Casa Court Site (Location A on Figure 37) and at the 230 La Casa Via Site, near La Casa Via (Location B). These measurements were made during the early afternoon on December 8, 1995.

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<sup>1</sup>A sound level meter was placed in a tree at the 230 La Casa via Site, approximately 375 feet from the centerline of La Casa Via and 1,400 feet from the main medical center building.

<sup>2</sup>A sound level meter was placed in a tree next to a residence at the south end of Los Cerros Avenue. This location is approximately 250 feet from the main medical center and helipad. It is about 25 feet lower in elevation than the main building and helipad.

<sup>3</sup>A sound level meter was placed in the southwest portion of the main parking lot. This location was approximately 200 feet from the main medical center building and 375 feet from the helipad, within the designated helicopter flight path.

The average noise level measured over a 15-minute period at Location A was 46 dBA, resulting primarily from the hospital and traffic on Ygnacio Valley Road. This location was about 750 feet from the main medical center and 370 feet from the centerline of the La Casa Via roadway.

At Location B, the average noise level measured over two consecutive 15-minute periods was 50 dBA, the result of traffic on La Casa Via. This location was next to the American First Baptist Church, approximately 100 feet from the centerline of the La Casa Via roadway.

(5) Helicopter Noise. The John Muir Medical Center operates an emergency helipad at the northwest corner of the Main Campus Site (see photo). The primary helicopter operator is CalStar, which uses Messerschmidt MK117 helicopters. Other helicopter operators also bring patients to the hospital. The normal flight path takes the helicopters in and out of the medical center from the southwest over the main parking lot and Ygnacio Valley Road as shown on Figures 4 and 5 in section III; however, weather conditions can alter the flight path.

According to the hospital's records as of September, 1995, an average of 31 helicopter flights per month has occurred over approximately the last four years. During this period, the greatest number of monthly helicopter flights occurred in September of 1993, when 57 flights were recorded; the fewest number of flights occurred in December of 1994, when 12 flights were recorded. In general, the greatest number of flights tend to occur in the summer months. During September 1995 there were 40 helicopter operations of which seven flights (18 percent) occurred during late night or early morning hours (between 10:00 PM and 7:00 AM).<sup>1</sup> With the exception of three donor organ transport flights, all of the flights were related to the hospital's emergency (trauma) operations.

The city of Walnut Creek refers citizen complaints regarding helicopter noise to the medical center.<sup>2</sup> According to the medical center, noise complaints regarding helicopter operations are currently made by neighbors about once every month or two. In the past, noise complaints were more frequent. However, within the last year the medical center and Caltrans established revised flight paths and other operational measures to reduce noise. The medical center now attempts to log and investigate the cause of each helicopter noise complaint.<sup>3</sup>

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<sup>1</sup>At the time this EIR noise study was conducted, the most recent helicopter trip data available from JMMC was tabulated in September 1995.

<sup>2</sup>Telephone conversation with Sandra Meyer, Associate Planner, city of Walnut Creek, January 8, 1996.

<sup>3</sup>Telephone conversation with Vince Scoccia, Plant Engineer, John Muir Medical Center, January 23, 1996.





***Helipad** at the northeast corner of the Main Campus Site.*



Table 25

RESULTS OF HELICOPTER NOISE MEASUREMENTS: DECEMBER 7, 1995

<u>Time</u>	<u>Description</u>	<u>Helicopter Type</u>	<u>Location 2 Residence</u>		<u>Location 3 Hospital Parking Lot</u>	
			<u>SEL</u>	<u>L<sub>max</sub></u>	<u>SEL</u>	<u>L<sub>max</sub></u>
2:30 PM	Inbound Flight	Cal Star-MBB	94	86	102	93
2:50 PM	Outbound Flight		102	95	97	89
5:30 PM	Inbound Flight	Cal Star-MBB	96	87	105	101
6:00 PM	Outbound Flight		100	91	96	86
10:10 PM	Inbound Flight	Cal Star-MBB	96	85	103	93
10:45 PM	Outbound Flight		93	78	97	84
11:10 PM	Inbound Flight	Cal Star-MBB	95	85	103	91
12:00 AM	Outbound Flight		92	81	97	86

SOURCE: Illingworth & Rodkin, Inc.

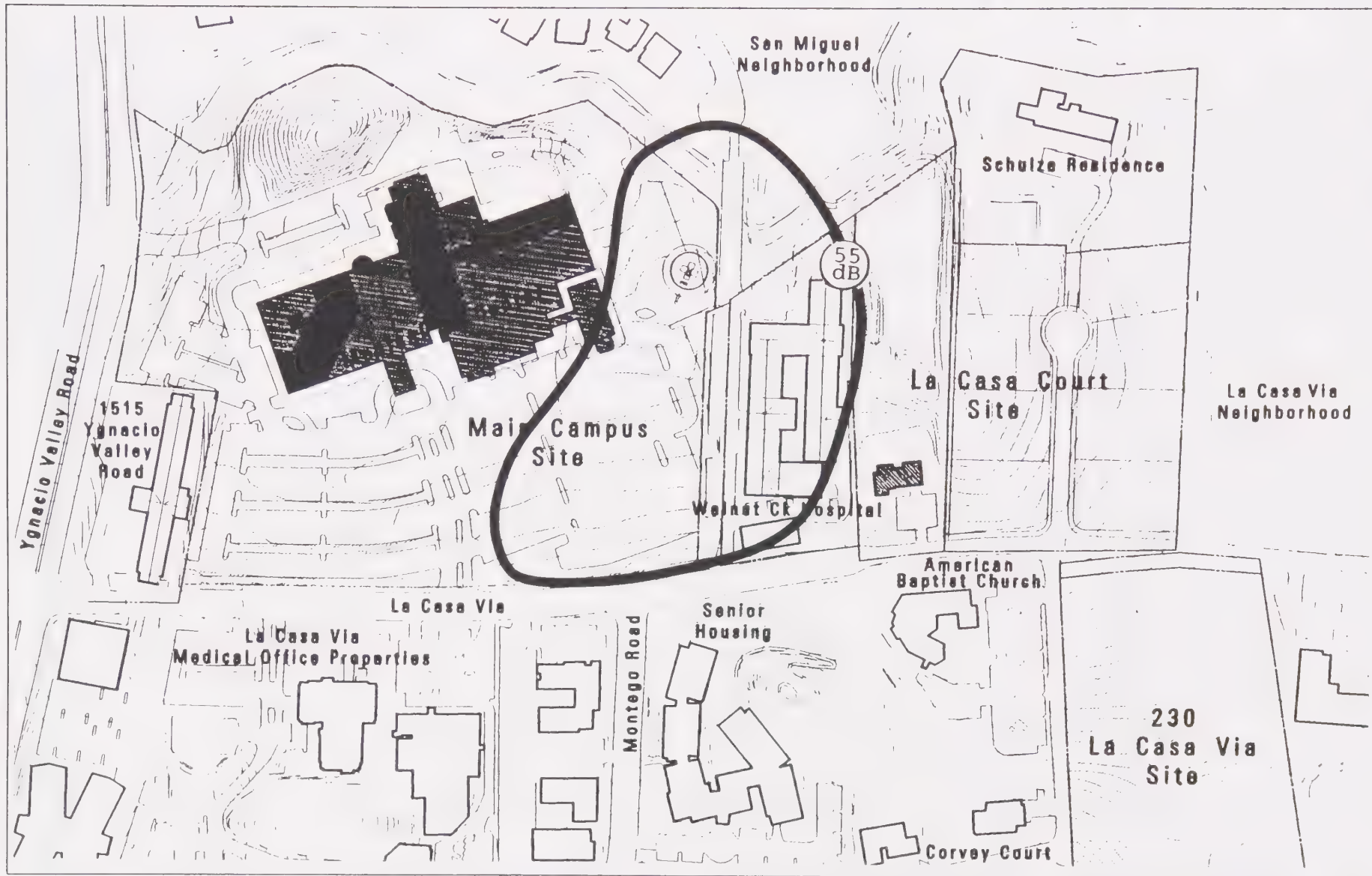
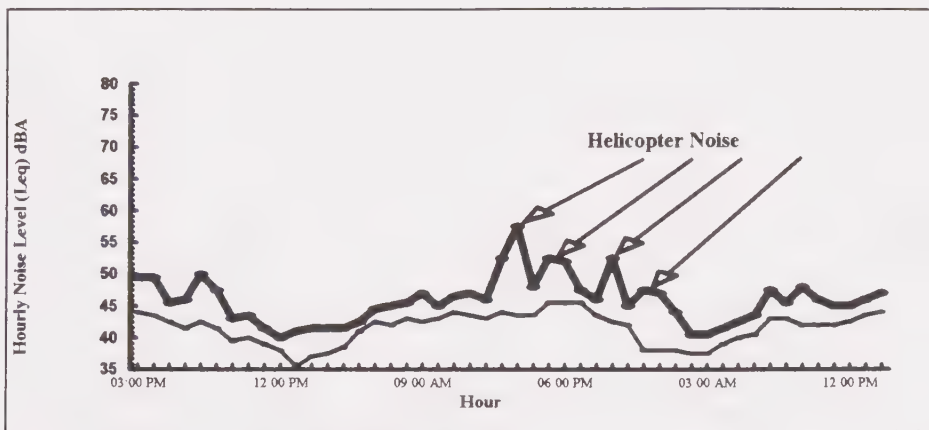
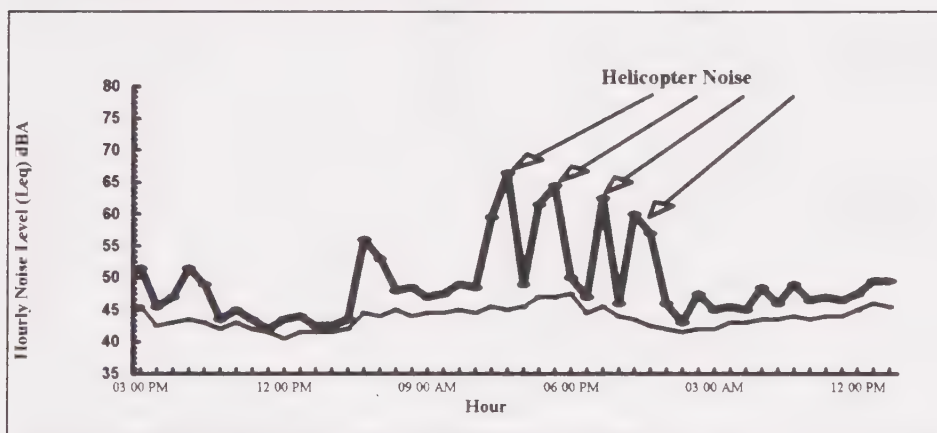


Figure 38  
**EXISTING 55 dbA Ldn  
 HELICOPTER NOISE CONTOUR**

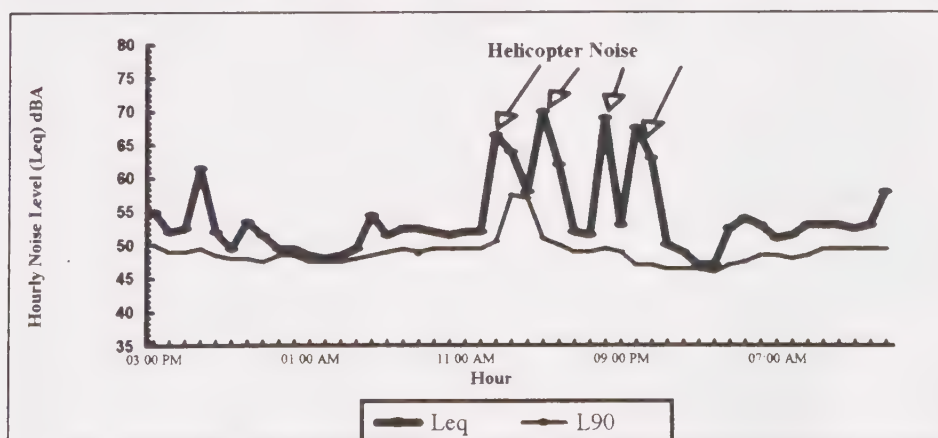
SOURCE: Illingworth and Rodkin, Inc.



**LOCATION 1: 230 La Casa Via Site**



**LOCATION 2: Near Residence - At End of Los Cerros Avenue**



**LOCATION 3: Hospital Parking Lot**

SOURCE: Illingworth and Rodkin, Inc.

Figure 39

## NOISE MONITORING RESULTS --DECEMBER 6-8, 1995



The noise levels produced by helicopter flights were measured on December 7, 1995 at two of the locations shown on Figure 37: Noise Monitoring Location 2 (nearest residence to the helipad) and Noise Monitoring Location 3 (main hospital parking lot). On this day there were four helicopter flights, a greater number than usual (the hospital averages about one flight per day). Two of the flights occurred during the late night hours. Each helicopter flight included an inbound and outbound movement. Results of the helicopter noise measurements are shown in Table 25. The resulting 55 dBA  $L_{dn}$  noise contour from overall helicopter operations is shown in Figure 38.

At Location 2, the resulting day/night noise level was 61 dBA  $L_{dn}$  when four helicopter flights occurred. This reading was 6 dBA higher than the level that would have occurred if there were no helicopter flights. The maximum noise level produced by the helicopter flights ranged from 78 to 95 dBA; the maximum noise levels produced by the late night flights ranged from 78 to 85 dBA. These noise events typically lasted about 30 seconds. The single event noise exposure level (SEL) ranged from 92 to 102 dBA. The calculated annual-average  $L_{dn}$ , based on a monthly average of 31 helicopter flights (72 percent occurring during the day and 18 percent occurring during the night), for this location is 53 dBA  $L_{dn}$  from helicopter operation alone. Without helicopter operations, the measured  $L_{dn}$  was 55 dBA. The combined overall average annual day/night noise level for this location is calculated to be 57 dBA  $L_{dn}$ . The daily noise level can range from 55 dBA on a day where there is no helicopter operations to a reasonable worst-case noise level of 61 dBA  $L_{dn}$  on a day with four helicopter flights.

At Location 3, louder noise levels were measured, since this location is under the flight path and has a direct line of sight to the helipad. The maximum noise levels measured at this location ranged from 84 to 101 dBA. At night, the maximum noise levels ranged from 84 to 93 dBA. The SEL for each flight ranged from 96 to 105 dBA.

## **2. IMPACTS**

### **a. Affected Environment**

The potentially significant noise issues associated with the John Muir Medical Center Campus Master Plan are:

- the compatibility of the proposed land uses with the projected noise environment;
- the extent to which noise from project-generated traffic, mechanical equipment and other normal medical center activities would adversely affect long-term noise levels in the area;
- the extent to which project-generated noise from helicopters would adversely affect noise levels in the area; and
- the extent to which project construction activities over the 20-year buildout period would substantially increase short-term noise levels locally.

#### **e. Project-Related Increases in Onsite Traffic Noise**

The Master Plan would establish a new circulation concept, which would involve the creation of a new Medical Center Way that would provide the main access to the medical center campus.

(1) Medical Center Way. The proposed Medical Center Way would be a new noise source, producing a noise level of 60 dBA  $L_{dn}$  within 60 feet of the roadway centerline. The Master Plan envisions future buildings located directly adjacent to the new Medical Center Way. Noise levels at the building sides facing the street would exceed 60 dBA  $L_{dn}$ , resulting in a *significant adverse noise impact (N Impact 2)* (see Criteria 1-3 under "b. Significance Criteria" above).

(2) Service Road. Without full extension of the proposed Medical Center Way to the La Casa Court Site, a service road that would be located next to the Walnut Creek Hospital would be required if the La Casa Court Site is developed. This road would be a new source of noise to the Walnut Creek Hospital. Traffic using the road would create a noise level of 60 dBA at a distance of 20 feet from the edge of the travel way. Location of the roadway edge closer than 20 feet from the Walnut Creek Hospital building would result in a *potentially significant adverse noise impact (N Impact 3)*. The noise impacts of this service road noise would be less than significant if the edge of the travel way is located at least 20 feet from the Walnut Creek Hospital building.

#### **f. Other Onsite Noise Sources**

(1) Mechanical Equipment Noise. The Master Plan would allow for expansion of existing buildings and addition of several buildings to the Main Campus Site, as well as new buildings at the La Casa Court Site and at the 230 La Casa Via Site. Anticipated mechanical equipment required to air-condition these buildings could potentially increase noise levels at adjacent land uses. This would represent a *potentially significant noise impact (N Impact 4)* (see Criteria 1-3 under "b. Significance Criteria" above).

(2) Parking Facility Noise. Cars circulating through surface parking lots and new parking structures, engines starting, doors slamming, car alarms, and people talking in parking lots produce noise. The Master Plan has not identified any specific designs for parking facilities. However, if large above-ground parking structures are located adjacent to sensitive land uses they could potentially increase noise levels at adjacent land uses. This is a *potentially significant impact (N Impact 5)* (see Criteria 1-3 under "b. Significance Criteria" above).

#### **g. Project-Generated Helicopter Noise**

The proposed Master Plan does not specifically propose any changes to the location, level of use, or general operation of the existing helipad. The Master Plan would, however, allow the

following possible changes that would have the potential to increase noise levels from helicopter operations:

(1) Increased Helicopter Flights Due to Increased Emergency Calls in Existing Service Area. The John Muir Medical Center is currently (and is expected to continue to be in the future) the sole trauma center for Contra Costa County. According to JMMC, the large majority of trauma flights to the JMMC Emergency Room are from all areas in Contra Costa County. Based on the severity of the injury, trauma patients are also transferred to JMMC from southwestern Solano County. Trauma flights can also originate from Alameda County when the trauma center that serves that area is non-operational.

According to hospital records, the majority of helicopter flights to and from JMMC are made on an emergency basis; there are no scheduled or routine helicopter flights. Assuming that future helicopter flights at the medical center continue to be mostly emergency-related, and assuming that Contra Costa County continues to account for the large majority of trauma flights, increases in future helicopter use for this purpose can be expected to be proportional to the increase in population in Contra Costa County through 2010. This relationship would translate into an increase of 32 percent in helicopter flights to and from the project area over the Master Plan buildout period. However, this increase in helicopter flights would be expected with or without the Master Plan, since John Muir Medical Center is currently (and expected to continue to be in the future) the sole trauma center for the county. The overall day/night noise level produced by current helicopter operations at the closest residence is 53 dBA  $L_{dn}$ . Future noise levels from helicopter operations are predicted to increase by 1 dBA  $L_{dn}$ . This increase would generally not be noticeable, and would be considered a less-than-significant impact.

(2) Expansion of Onsite Land Uses Requiring Helicopter Service. The Master Plan would allow a variety of medical land uses, in addition to and including emergency services, that have the potential to involve helicopter operations. Because the current application does not specify the extent of these anticipated land uses or provide details regarding their anticipated operations, it is not possible to estimate helicopter noise increases associated with such changes in use. Given the flexible nature of the currently proposed Master Plan, however, it is possible that the medical center could, for example, offer or expand services (e.g., organ transplants) that would require greater use of helicopters for non-trauma-related purposes. Any proposed expansion of the hospital's trauma operations could also lead to increased helicopter flights, although expansion of the hospital's trauma service area is not currently anticipated. The potential for future increases in helicopter noise due to increased helicopter-related medical center activities allowed by the Master Plan is considered a *potentially significant impact (N Impact 6)* (see Criteria 1-3 under "b. Significance Criteria" above).

(3) Helipad Relocation. Relocation of the helipad is not identified in the Master Plan application. However, since the existing helipad lies within the Main Campus Site building mass envelope identified in the Master Plan application, it is conceivable that the pad at some



future time could be relocated within this envelope, perhaps to the top of a future building, as areas are infilled with new construction.

The Master Plan does specify that a helipad would not be permitted on the La Casa Court or 230 La Casa Via sites.

Relocation of the helicopter pad to a rooftop location could slightly reduce noise levels at adjacent homes. This would be a beneficial impact. Relocation of the helipad closer to adjacent residences and/or an alteration of the helicopter flight path would, however, have the potential to increase noise levels in adjacent neighborhoods. This possibility is considered a *potentially significant impact (N Impact 7)* (see Criteria 1-3 under "b. Significance Criteria" above).

#### **h. Project Construction Noise**

Significant short-term noise impacts on sensitive hospital operations and offsite noise-sensitive land uses would be expected during heavy periods of construction activity. This possibility represents a *potentially significant impact (N Impact 8)* (see Criteria 1-3 under "b. Significance Criteria" above).

Construction associated with the various phases of Master Plan buildout could involve combinations of building demolition, site grading, new building construction, and roadway construction. The level of noise from such construction activities would depend on several factors including:

- The phase of construction (i.e., demolition, excavation, building erection, etc.);
- The type of equipment used and the location on the construction site at which it is used;
- The amount of time that a given piece of equipment will operate in its loudest mode; and
- The location of existing and future noise-sensitive receptors with respect to construction activities.

Representative noise levels normally anticipated from specific construction equipment types are listed in Table 26. Use of all of the construction equipment types listed, with the exception of impact pile drivers and rock drills, would be anticipated during the various project construction phases. The listed noise levels are indicative of noise measured at a distance of 50 feet from construction equipment during operation. Typical overall noise levels produced at 50 feet from construction sites are shown in Table 27.

The greatest potential for adverse noise impacts to medical center functions during construction activities would be to sensitive existing hospital operations. Noise impacts from construction would be greatest to occupants in both the existing and new hospital buildings. Residences to the north in the San Miguel neighborhood areas adjacent to the Main Campus

Table 26  
TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVEL RANGES

		A-weighted Noise Level (dB) At 50 Feet					
		60	70	80	90	100	110
Earth Moving:							
	Compactors (Rollers)						
	Front Loaders						
	Backhoes						
	Bulldozers						
	Scrapers, Graders						
	Pavers						
	Trucks						
Materials Handling:							
	Concrete Mixers						
	Concrete Pumps						
	Cranes (Movable)						
	Cranes (Derricks)						
Stationary:							
	Pumps						
	Generators						
	Compressors						
Impact Equipment:							
	Pneumatic Wrenches						
	Jackhammers and Rock Drills						
	Pile Drivers (Peak)						
Other:							
	Vibrators						
	Saws						
Source: Handbook of Noise Control, Cyril M. Harris, 1979.							

Table 27

TYPICAL RANGES OF ENERGY EQUIVALENT NOISE LEVELS,  $L_{eq}$  IN dBA, AT  
CONSTRUCTION SITES

	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement and Recreation, Store Service Station		Public Works Roads and Highways, Sewers, and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

SOURCE: US EPA, Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

I - All pertinent equipment present at site.

II - Minimum required equipment present at site.



Site, and to the east in the La Casa Via neighborhood areas adjacent to the La Casa Court Site and 230 La Casa Via Court Site, also could occasionally be exposed to high noise levels during periods of heavy construction.

### 3. MITIGATIONS

#### a. Compatibility of Proposed Land Uses With Project Noise Environment

(1) Ygnacio Valley Road. (**N Impact 1**) Implement noise abatement measures and specifications in site planning and building construction for hospital building sites that are adjacent to Ygnacio Valley Road in order to achieve an interior noise level of 45 dBA or less. For example, fixed windows or casement windows in new building facades would typically provide about 25 to 30 dBA of traffic noise reduction, and would be adequate to reduce interior noise levels in this environment to less than significant levels.

#### b. Project-Generated Increases in Offsite Traffic Noise

(1) Ygnacio Valley Road. No significant project-generated increase in impact identified; no mitigation required.

(2) La Casa Via. No significant project-generated increase in impact identified; no mitigation required.

(3) Montego Road. No significant project-generated increase in impact identified; no mitigation required.

(4) Medical Center Way. No significant project-generated increase in impact identified; no mitigation required.

#### c. Project-Generated Increases in Onsite Traffic Noise

(1) Medical Center Way. (**N Impact 2**) Implement noise abatement measures and specifications in site planning and building construction to achieve an interior noise level of 45 dBA or less in hospital buildings that are adjacent to the new Medical Center Way roadway and within 60 feet of the roadway centerline. This measure would reduce the impact to a less-than-significant level.

(2) Service Road. (**N Impact 3**) If the medical center street is not fully extended and a service road is needed adjacent to the Walnut Creek Hospital, require that the road edge be located at least 20 feet from the Walnut Creek Hospital building. This measure would reduce the impact to a less-than-significant level.

**d. Other Onsite Noise Sources**

(1) Mechanical Equipment Noise. (N Impact 4) To mitigate (avoid) noise impacts from building air conditioning equipment, select and orient mechanical equipment on the buildings so that noise levels would not exceed 45 dBA  $L_{eq}$  at residences near the 230 La Casa Via Site and the La Casa Court Site and levels do not exceed 50 dBA at the residence adjacent to the northern portion of the main medical center. These standards can be met by orienting the building exhaust away from nearby noise-sensitive areas and providing adequate shrouding, shielding, and muffling around ventilation systems affecting nearby areas. This measure would reduce the impact to a less-than-significant level.

(2) Parking Facility Noise. (N Impact 5) Require subsequent detailed noise assessments for construction of any parking facilities adjacent to the northern, eastern, or southern edges of the medical center campus. These studies shall be conducted on a project-specific basis prior to the granting of a building permit. The studies shall recommend measures to ensure that noise from future parking facilities would not exceed city exterior and interior noise standards at the nearest adjacent residences. At applicant expense, also retain a qualified acoustical consultant to conduct an independent review of the detailed noise assessment(s). Assuming that future parking facilities comply with these provisions, the impact would be reduced to a less-than-significant level.

**e. Project-Generated Helicopter Noise**

(1) Increased Helicopter Flights Due to Increased Emergency Calls in Existing Service Area. No additional Master Plan-related noise impacts identified; no mitigation required.

(2) Expansion of Onsite Land Uses Requiring Helicopter Services. (N Impact 6) At the time of Master Plan approval by the city council, or within six months of Master Plan approval, the applicant shall submit a noise study which analyzes the optimum location for the helipad based on noise impacts on surrounding residential neighborhoods. (Surface helipads as well as rooftop locations shall be analyzed.)

In addition, any subsequent Use Permit application shall include a study indicating potential increased helicopter traffic to and from the current helipad and the associated subsequent increase in noise. If the proposal would increase noise in the adjoining neighborhoods by more than 1 dBA, the Planning Commission may require that the helipad be moved to its optimum location based on the initial noise study submitted at the time of (or within six months of) Master Plan approval.

Helicopter noise from John Muir Medical Center is considered a substantial source of noise to neighbors in the San Miguel Neighborhood. Any potential increase in noise of more than 1 dBA  $L_{dn}$  to the adjoining neighborhoods from project-related helicopter operations shall be considered significant and appropriate mitigation measures should be implemented.

(3) Helipad Relocation. **(N Impact 7)** Same as mitigation for *N Impact 6* above.

**f. Project Construction Noise**

**(N Impact 7)** Incorporate provisions in the Master Plan that would require future project construction contractors to comply with the following measures, with verification of such contract stipulations submitted to the City:

(1) Scheduling. Schedule construction activities to have the least impact on existing medical center facilities. This measure could include restricting typical demolition and construction activities to the hours of 8 AM to 5 PM. Certain activities, such as the use of jackhammers on existing buildings, may need to be scheduled for special time periods.

(2) Hospital Patient Relocations. If necessary, temporarily relocate patients who currently occupy portions of the existing hospital to other locations on campus during the loudest periods of nearby construction, i.e., when average 24-hour interior noise levels are likely to exceed 60 dBA.

(3) Other Relocations. If necessary due to temporary disturbances during various phases of construction, temporarily relocate other activities in the hospital. Such relocations could be minimized or avoided by strategic scheduling of construction activities as described above.

(4) Noise Barriers for Hospital Patient Rooms. Where relocation is not feasible, construct temporary noise barriers as necessary to shield patient rooms within the existing hospital from new hospital building construction activities. It is recommended that this mitigation measure not be instituted until construction has begun and has been found to cause a significant disturbance to certain rooms. A plywood noise barrier could be erected quickly outside those affected rooms which face the construction sites. The combination of the barrier and restriction of construction to daytime only should reduce noise impacts to less than significant levels. The degree of the disturbance and corresponding mitigation needs, however, cannot be fully quantified until the construction activities actually take place.

(5) Construction Contract Stipulations. Also include in construction contracts the following stipulations with regard to other noise impact mitigation measures to be implemented by the construction general contractor(s):

- All internal combustion engine-driven construction equipment should be equipped with mufflers that are in good condition.
- Backup beepers should be prohibited. Spotters or flaggers in clear view of the operator should be used in lieu of beepers to direct the backing operation of mobile equipment on the site per the requirements of Title 8, Section 1592 of the California Administrative Code.



- "Quiet" gasoline powered compressors or other electric powered compressors should be used. Electric rather than gasoline or diesel powered forklifts should be used.
- Welded rather than bolted steel constructions should be used when possible to minimize the use of impact wrenches.
- A disturbance coordinator with detailed knowledge of the construction activities and authority to act regarding disturbances should be retained and identified. This disturbance coordinator's responsibilities should include ongoing monitoring of project compliance with required noise impact mitigation measures, identification of additional mitigation measures warranted to mitigate disturbances where possible, and taking constructive actions as necessary to minimize construction disturbances at adjoining occupied buildings.
- It is not possible to know in advance who will be bothered, and to what degree, by the various phases of demolition and construction adjacent to and within the existing hospital. It is, therefore, necessary for the contractor to understand and be required within the contract documents to take those steps that are feasible to reduce the level of disturbance. This could include working multiple shifts at critical stages, with some work occurring at night, to reduce the duration of the noise impact.

Enforced compliance with these contract stipulations would reduce the impact to a less-than-significant level.

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## G. HEALTH AND SAFETY

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This section describes existing and projected conditions at the JMMC site with respect to the presence and handling of hazardous materials and wastes, the associated impact potentials of the proposed Master Plan, and related mitigation needs.

### 1. SETTING

#### a. Hazardous Building Materials

(1) Asbestos. Asbestos is a substance historically used in construction materials that presents a human health hazard when it is released into the air and inhaled. Until 1971, asbestos-containing materials were often used in U.S. building construction for insulation and fire-proofing. Since then, the U.S. Environmental Protection Agency (EPA) has classified asbestos as a Class A Carcinogen, which means that there is sufficient evidence from epidemiological studies to support a causal association between human exposure and cancer. Asbestos exposure has been shown to cause asbestosis, a scarring of lung tissue, and other non-cancer health problems.

Some asbestos material, such as sprayed-on ceiling surfacing, is considered "friable" (i.e., a material containing more than one percent asbestos by weight that, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure). Friable asbestos is considered to be more of a hazard than non-friable material, such as vinyl asbestos tile, which has tightly bound fibers that are not easily released unless the material is cut or damaged.

(a) *Asbestos Regulation*. Because of the high potential for health hazards, asbestos removal, the demolition of buildings containing asbestos are activities which are strictly regulated by the U.S. Environmental Protection Agency (EPA),<sup>1</sup> the federal Occupational Safety and Health Administration (OSHA),<sup>2</sup> and the Bay Area Air Quality Management District

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<sup>1</sup>The Toxic Substances Control Act sets forth regulations protecting workers during asbestos abatement projects. These regulations require that all such projects involving three or more square feet of asbestos be reported to the EPA ten days before the project begins.

<sup>2</sup>29 Code of Regulation (CFR) Parts 1910.1001 and 1926.58 set forth OSHA regulations protecting workers removing asbestos during building demolition.

(BAAQMD).<sup>1</sup> The regulations of these agencies apply to the selection of contractors, the set-up of the removal operation, the actual removal, and the disposal of the materials (including long-term liability).

OSHA and EPA both regulate removal, respiratory protection, and air sampling practices at the removal site. Monitoring practices during removal must include area air sampling in order to measure the fibers in a given area (including outside the removal area), and personnel samples to measure the fibers in removal workers' breathing zones. Disposal is regulated at the state and federal level. The material must be marked, double-bagged, and transported by a licensed hauler to an appropriate disposal site. All of these regulations are intended to minimize both worker and public exposure to asbestos.

(b) *Asbestos on the Project Site.* The following buildings on the project site are known to or may contain asbestos:

**Main Campus Site:<sup>2</sup>**

- The Phase I building contains asbestos fire-proofing on structural steel, pipe lagging, and floor tiles. Asbestos has been removed and/or encapsulated in areas where extensive remodelings have taken place, comprising approximately 30 percent of the Phase I building. (The Phase II building is not believed to contain asbestos except in tile flooring.)

**La Casa Court Site:**

- The 185 La Casa Via building, which was constructed in 1958, may contain asbestos, since it was constructed before the U.S. Environmental Protection Agency (EPA) has classified asbestos as a Class A Carcinogen (in 1971).

(2) Other Hazardous Building Materials. Other potentially hazardous materials sometimes found in older building construction include (a) PCBs, which are organic oils formerly used in electrical equipment that have been discovered to cause human health hazards, including cancer, and were banned by the U.S. Environmental Protection Agency in the early 1980s, and (b) lead-based paint, which has been linked to a variety of human health problems, particularly in children, and is not generally used in new construction. The John Muir Medical Center no longer uses PCBs or lead-based paint in new building construction or renovation. Medical center representatives believe that, to the best of their knowledge, these potentially

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<sup>1</sup>BAAQMD Regulation II, Rule 2, regulates demolition, renovation, and removal of building elements containing more than 160 square feet of friable asbestos material, and sets forth requirements for the disposal of such material and for reporting such activity.

<sup>2</sup>Transmittal from Brian O'Driscoll, Thistlethwaite Architectural Group, to Natalie Macris, Wagstaff and Associates, re. "Request for Information," January 10, 1996.



hazardous materials were completely removed from the existing buildings on the site during previous renovations.<sup>1</sup>

#### **b. Hazardous Materials Handled at the Medical Center**

The existing medical center includes activities which make use of and store a variety of hazardous materials. Most existing hazardous material use is associated with laboratory activities, patient treatment, and diagnostics. Hazardous materials typically found at such medical facilities include:<sup>2</sup>

- solvents and chemical reagents;
- drugs and pharmaceuticals used for medical therapy;
- radioisotopes (radioactive elements) used for diagnosis or therapy;
- infectious agents, including bacteria, viruses, and similar agents;
- test samples (e.g., blood or tissue specimens), for use in a testing procedure; and
- miscellaneous materials used for maintenance and cleaning.

The medical center maintains a *Business Plan* in accordance with the Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act), which requires any business that handles hazardous materials to prepare a Business Plan that includes (1) details, including floor plans, of the facility and business conducted at the site; (2) an inventory of hazardous materials that are handled or stored on site; (3) an emergency response plan; and (4) a safety and emergency response training program for new employees, with annual refresher courses. In Contra Costa County, the County Health Services Department, Hazardous Materials Division receives and administers Business Plans. Table 28 lists hazardous materials regulatory permits currently held by the medical center.

The following discussion generally describes the current use and management of hazardous materials at the medical center.<sup>3</sup> An inventory of hazardous materials handled at the medical center is on file at the city of Walnut Creek Community Development Department. Current hazardous waste disposal practices at the medical center are described under item c, "Hazardous Wastes Handled at the Medical Center" below.

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<sup>1</sup>Telephone conversation with Brian O'Driscoll, Thistlethwaite Architectural Group (John Muir Medical Center Project Architect), February 16, 1996.

<sup>2</sup>ESA, Kaiser Medical Center Phase III Expansion, Subsequent Environmental Impact Report (Draft), February 2, 1996, page 3.10-3; and Palo Alto Medical Foundation Draft Environmental Impact Report, October 20, 1995, page IV.E-6.

<sup>3</sup>FAX communication from Carol Thompson, Supervisor, Environmental Services, John Muir Medical Center, to Natalie Macris, Wagstaff and Associates, February 15, 1996.

Table 28  
EXISTING HAZARDOUS MATERIALS REGULATORY PERMITS HELD BY JOHN MUIR  
MEDICAL CENTER

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<u>Issuing Agency</u>	<u>Permit</u>
Contra Costa County Fire Protection District	Permit to Operate
Contra Costa County Health Services Department, Division of Environmental Health	Permit to Operate
Contra Costa County Sanitary District	Class II Industrial User Permit
Contra Costa County Health Services Department, Division of Environmental Health	Hazardous Materials Permit
Contra Costa County Health Services Department, Division of Environmental Health	Underground Storage Tank Permit
California Department of Industrial Relations, OSHA Division	Permit to Operate Air Pressure Tank

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SOURCE: John Muir Medical Center, February 1996.

(1) Laboratories. Hazardous chemicals are commonly used in the Pathology Department and the Clinical Lab area of the medical center, including alcohols, xylenes, formaldehydes, stains and reagents used in slide preparation, acids (e.g., nitric acid, hydrochloric acid and glacial acetic acid), and bases (e.g., sodium hydroxide, ammonium hydroxide). These materials are generally stored in small quantities. A designated laboratory safety coordinator is responsible for developing and implementing conventional safety policies for the management of hazardous materials.

(2) Pharmacies. Pharmacies at the medical center store small quantities of various hazardous compounds, including anti-neoplastic drugs (chemotherapy agents), acids, bases and alcohol. Approximately 95 percent of the compounds distributed by pharmacies are packaged and remain sealed upon distribution.

(3) Central Processing. The Central Processing Department, located in the basement of the main building, is responsible for sterilization of medical instruments, equipment and surgical linen drapes. Hydrogen peroxide sterilizers are used for this process. No ethylene oxide (EtO) sterilizers are used by this facility. EtO, a toxic gas, was used for sterilizing instruments until July of 1993, when the hospital removed the EtO sterilizers to avoid the toxic by-products associated with this procedure.<sup>1</sup> (See further discussion of ethylene oxide in section IV.J, Air Quality, of this EIR.)

(4) Environmental Services. The Environmental Services Department of the JMMC is responsible for cleaning and disinfecting hospital facilities. Cleaning products may include low concentrations of fungicides or herbicides. Environmental Services is also responsible for the management and disposal of some wastes that require special handling, including hazardous wastes generated by various medical departments and sterilization of biohazardous waste using the Sanipak steam-sterilizer compactor (see discussion under item c, "Hazardous Wastes Handled at the Medical Center" below).

(5) Central Utilities/Engineering. Mechanical and electrical services are provided in the basement of the main building and in an auxiliary carpenter's shop/storage building located on the northeast side of the main building. The Main Campus Site contains an underground storage tank that provides fuel for generators. Other flammable, combustible, and volatile substances and wastes such as fuels, solvents, paints, water treatment agents, waste oils, lubricants, batteries, compressed gas cylinders and drums are stored and managed by engineering personnel as part of operation and maintenance of the medical center.

(6) Other Departments. Other departments that handle hazardous materials include Anesthesia and Surgery (alcohol, halothane), Nuclear Medicine and Radiology (radioactive

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<sup>1</sup>Telephone conversation with Carol Thompson, Supervisor, Environmental Services, John Muir Medical Center, February 16, 1996.



dyes and implants), and Eye Lab and Radiology (photographic fixer). The photographic fixer is recycled off-site.

### **c. Hazardous Wastes Disposal at the Medical Center**

Existing medical center operations produce five types of hazardous waste: infectious waste, anatomical waste, chemotherapy waste, chemical waste, and radioactive waste. In accordance with the Hazardous Waste Source Reduction and Management Review Act of 1989 (SB 14), the medical center maintains a *Hazardous Waste Minimization Plan* that describes the medical center's existing hazardous waste streams and methods for reducing them (e.g., replacing ethylene oxide (EtO) sterilizers, recycling silver from photographic processes, requiring contractors to remove their own paints, switching from oil-based to water-based paints).<sup>1</sup> The following discussion reviews procedures for disposing of the five hazardous waste categories handled at the medical center.

(1) Infectious Waste. Infectious waste is medical waste that is capable of producing infectious disease, and is comprised primarily of waste that has come into contact with blood or regulated body fluid products. This waste category includes "sharps" (i.e., objects having acute corners, edges, or protuberances capable of cutting or piercing, including but not limited to hypodermic needles, blades, and broken glass). Such waste is considered hazardous primarily due to the danger of transmittal of Hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV), and other blood-borne infectious agents found in health care settings.

Infectious waste is routinely handled at the medical center in compliance with U.S. Center for Disease Control Guidelines for Universal Precautions. Some of this waste is disposed in containers lined with red bags with "Bio-Hazard" symbols, stored on-site in a covered, fenced, and locked storage area, and collected and disposed by Stericycle, Inc., a licensed and certified infectious waste collection company. Some infectious waste is disposed in yellow biohazardous waste containers lined with red bags with "Bio-Hazard" symbols and transported to an on-site Sanipak unit (see photo), which sterilizes and compacts the waste, allowing it to be disposed of safely along with non-hazardous waste generated by the facility (see discussion of solid waste collection and disposal in section IV.E, Public Services and Utilities).<sup>2</sup>

(2) Anatomical Waste. Anatomical waste consists of pathological and placental waste. These wastes are disposed in approved anatomical waste containers double-lined with red "Bio-Hazard" labelled bags. These containers are stored in a covered, fenced, and locked storage area and collected and disposed by Stericycle, Inc.

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<sup>1</sup>Telephone conversation with Carol Thompson, Supervisor, Environmental Services, John Muir Medical Center, February 16, 1996.

<sup>2</sup>Telephone conversation with Carol Thompson, Supervisor, Environmental Services, John Muir Medical Center, January 15, 1996.



**Sanipak Facility** located at the northeast corner of the existing Main Campus building. The Sanipak device sterilizes and compacts infectious waste, allowing it to be disposed safely along with non-hazardous waste generated by the medical center.

(3) Chemotherapy Waste. Chemotherapy waste (e.g., antineoplastic "chemo" drugs) are generated from the chemical treatment of disease. These wastes are routinely disposed in yellow chemo bags inside rigid plastic chemo-labelled containers, stored in a covered, fenced, and locked storage area, and collected and disposed by Stericycle, Inc.<sup>1</sup> Chemotherapy wastes present health risks similar to other toxic chemicals, as described below.

(4) Chemical Waste. Hazardous chemicals are commonly used in the JMMC Pathology Department and other medical center departments. These chemicals present health risks due to their toxic nature and/or their potential corrosiveness or explosiveness. Such chemicals represent a small portion of the hazardous materials currently handled at the medical center. Used or outdated chemicals are discarded into steel drums in an on-site covered, fenced, and locked storage area, and hauled away by USPCI/Laidlaw, a licensed and certified hazardous waste management company.<sup>2</sup>

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<sup>1</sup>Ibid.

<sup>2</sup>Ibid.



(5) Radioactive Waste. Radioactive waste produced in medical center operations includes small amounts of low-level radioisotopes used in diagnosis and therapy. These wastes are handled and disposed of according to State of California and federal Nuclear Regulatory Commission regulations. The waste is stored on-site in a holding area until radioactivity has decayed sufficiently to allow the waste to be hauled off-site along with infectious waste by Stericycle, Inc.

#### **d. Health, Safety, and Emergency Response Procedures**

The John Muir Medical Center has established procedures for protecting the health and safety of its employees and the public during normal operations and during emergencies, and has documented and circulated these procedures to JMMC staff in the form of two manuals. The JMMC's Emergency Preparedness Manual details the medical center's procedures for addressing fires, earthquakes, communications system or utility failures, hazardous materials, radiation accidents, and other emergencies. The JMMC's Health and Safety Manual addresses injury and illness prevention, fire and life safety, hazardous materials and waste management, utilities, infection control, emergency preparedness and response, medical equipment, and departmental safety procedures.

#### **e. Potential Soil/Groundwater Contamination**

(1) Underground Fuel Storage Tanks. Underground fuel storage tanks that are old and/or in poor condition can develop leaks, allowing fuel to escape into soil or groundwater. This is a common source of soil and groundwater contamination.

In 1993, JMMC removed a steel, 10,000-gallon underground diesel fuel storage tank located in the rear parking area in the northeast corner of the Main Campus Site. Approvals and permits to remove the tank were obtained from the Contra Costa County Health Services Department, the Contra Costa County Fire Protection District, CAL-OSHA, and the Bay Area Air Quality Management District. The tank, which was originally installed during Phase I construction in 1965, was excavated and disposed of at the Erickson Hazardous Waste Facility in Richmond. Samples of soils surrounding the former tank location were then tested for contamination from petroleum hydrocarbons. The stockpiled soils were found to contain elevated levels of petroleum hydrocarbons, and were hauled to the BFI Landfill in Livermore. The excavation area was then backfilled with imported material.<sup>1</sup>

The Main Campus Site currently contains a 12,000-gallon underground diesel fuel storage tank, located on the west side of the Phase III building. The tank, which was installed in 1988, is fitted with two fiberglass walls and an alarm system that is triggered if fuel leaks out

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<sup>1</sup>Aqua Science Engineers Inc., Final Report, Underground Storage Tank Removal and Disposal (ASE Job No. 2677) at the John Muir Medical Center, 1601 Ygnacio Valley Road, Walnut Creek, California, October 25, 1993, pages 1-4.



of the inner wall; this allows the leak to be detected and the tank repaired before the fuel leaks out of the outer wall and into surrounding soils.<sup>1</sup> The Contra Costa County Health Services Department, Environmental Health Division, has issued a five-year permit for the tank. The permit expires on May 31, 1998.<sup>2</sup>

(2) Agricultural Activities. The 230 La Casa Via Site shows evidence of having at one time contained a walnut orchard. Some older commercial agricultural operations used herbicides and pesticides, such as DDT and/or 2, 4 D, which were more persistent than those that are used today, and potentially toxic residues from these materials can sometimes be found in soil or groundwater. In the case of the 230 La Casa Via Site, however, the orchard was planted by the owner of a house than previously stood on the site. The orchard was not in commercial use, and the previous owner states that pesticides/herbicides were not applied to the trees.<sup>3</sup> It is therefore considered unlikely that soils or groundwater on this site contain residues of agricultural chemicals.

## 2. IMPACTS

### a. Significance Criteria

Based on the CEQA Guidelines,<sup>4</sup> a project would normally be considered have a significant health and safety effect if it would:

1. Expose people to existing sources of potential health hazards (CEQA Guidelines, Appendix I, Item IX(d));
2. Create a health hazard or potential health hazard, or involve the use, production, or disposal of materials that pose a hazard to people or animal or plant populations in the area affected (CEQA Guidelines, Appendix G, Item v, and Appendix I, Item IX(c));
3. Interfere with emergency response plans or emergency evacuation plans (CEQA Guidelines, Appendix G, Item z, and Appendix I, Item IX(b)); or

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<sup>1</sup>Telephone conversation with Vince Scoccia, Director, Plant Services Department, John Muir Medical Center, March 26, 1996.

<sup>2</sup>Contra Costa County Health Services Department, Environmental Health Division, Permit to Operate Underground Storage Tank, site ID #01312, issued June 1, 1993, expires May 31, 1998.

<sup>3</sup>Telephone conversation with Richard Webster, former owner, 230 La Casa Via Site, January 10, 1996.

<sup>4</sup>State of California, Governor's Office of Planning and Research, Guidelines for Implementation of the California Environmental Quality Act, 1995.

4. Create a risk of accidental explosion or release of hazardous substances (including, but not limited to, oil, pesticides, chemicals, or radiation) (CEQA Guidelines, Appendix I, Item IX(a)).

This EIR uses these criteria to evaluate the potential health and safety impacts of the proposed JMMC Master Plan.

**b. Hazardous Building Materials**

(1) Existing Materials. Implementation of the proposed Master Plan may involve expansion and/or demolition of portions of the Phase I building on the Main Campus Site, which is known to contain asbestos, and the 185 La Casa Via building on the La Casa Court Site, which may contain asbestos. Non-friable asbestos can become friable in the process of removal, thus creating a potentially significant health hazard during expansion or demolition of older buildings. This possibly represents a *potentially significant impact (HS Impact 1)* (see Criteria 1, 2, and 4 under "a. Significance Criteria" above).

(2) Introduced Materials. During any construction in accordance with the Master Plan, construction workers may bring potentially hazardous materials, such as fuel, solvents, paints, and oils, onto the project site. These materials would represent a potentially significant health hazard if they are spilled or misused. This is a *potentially significant impact (HS Impact 2)* (see Criteria 1, 2, and 4 under "a. Significance Criteria" above).

**c. Other Hazardous Materials Handling and Storage**

Expansion of the medical center operations in accordance with the proposed Master Plan would result in onsite increases in the handling and storage of hazardous materials. The medical center would be required to amend its *Business Plan* for any expansion of the facility.<sup>1</sup> Continuation of existing practices employed by the John Muir Medical Center in the handling and storage of these materials in compliance with federal, state, and local regulations would be expected to limit the potential human health impact to less-than-significant levels.

**d. Hazardous Waste Disposal**

Expansion of the medical center operations in accordance with the proposed Master Plan would also result in substantial on-site increases in the presence and handling of infectious waste and a smaller increase in the presence and handling of chemotherapy, hazardous chemical, and radioactive wastes. Continuation of existing practices employed by the John Muir Medical Center in the handling, storage, and disposal of these wastes in compliance with

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<sup>1</sup>Telephone conversation with Sonny Khoo, Hazardous Materials Specialist, Contra Costa County Department of Environmental Health, Hazardous Materials Division, January 16, 1996.

federal, state, and local regulations would be expected to limit the potential human health impact to less-than-significant levels.

**e. Potential Soil/Groundwater Contamination**

(1) Underground Storage Tanks. Future building renovation or new construction in accordance with the proposed Master Plan has the potential to expose construction workers, the public, or the environment to contaminated soil or groundwater, if such conditions exist on the project site due to leakage from the underground storage tank on the Main Campus Site. The tank, while not currently known to be leaking, could develop leaks over time, allowing diesel fuel to escape into soils or groundwater. This possibility represents a *potentially significant impact (HS Impact 3)* (see Criteria 1,2, and 4 under "a. Significance Criteria" above).

**f. Cumulative Impacts**

(1) Transport of Hazardous Materials and Wastes. The expanded medical center operations would contribute to cumulative increases in the amount of hazardous materials and wastes transported through Walnut Creek and the surrounding area. This is considered a less-than-significant impact, since transport of hazardous materials and waste is heavily regulated by state and federal agencies, including the U.S. Department of Transportation, the U.S. Environmental Protection Agency, the California Department of Transportation, and the California Highway Patrol.

(2) Hazardous Waste Disposal. The expanded medical center would also contribute to cumulative increases in hazardous wastes requiring off-site disposal. This would also be considered a less-than-significant impact, provided that the medical center continues existing practices aimed at reducing hazardous waste volumes (e.g., use of the existing Sanipak facility). Previous environmental documents prepared for other medical facilities in the area have found that adequate treatment capacity exists to support reasonably foreseeable cumulative increases in medical waste generation.<sup>1</sup>

(3) Emergency Response. The expanded medical center, combined with other growth in Walnut Creek (particularly growth involving increased hazardous materials use), would lead to cumulative increases in demand for hazardous materials emergency response services. This is considered a less-than-significant impact, provided that the medical center continues existing hazardous material/waste handling practices and emergency response procedures. The project is not expected to interfere with emergency response plans or emergency evacuation plans (see further discussion in section IV.E(2) and (3), Public Services and Utilities, "Fire Protection Services" and "Police Services").

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<sup>1</sup>ESA, Kaiser Medical Center Phase III Expansion, Subsequent Environmental Impact Report, February 2, 1996, page 3.10-13.



### 3. MITIGATIONS

#### a. Hazardous Building Materials

(1) Existing Materials. **(HS Impact 1)** Prior to approval of a Use Permit for any subsequent development within the Master Plan boundary involving demolition or renovation of existing buildings, require the applicant to retain a qualified environmental specialist to inspect the subject buildings for presence of asbestos and/or other hazardous building materials that would require special handling. If such materials are identified, require the materials to be managed in accordance with all applicable state and federal regulations. This measure would reduce the impact to a less-than-significant level.

(2) Introduced Materials. **(HS Impact 2)** As a condition of all future project-related construction contracts, require the contractor(s) to develop a *hazardous materials management plan* that identifies (a) hazardous materials that would be temporarily stored onsite during construction activities, (b) storage and containment areas and methods, (c) responsible personnel and safety and emergency procedures in case of accidental releases or exposures, and (d) personnel training requirements. Require review and approval of the plan by the Contra Costa County Fire Protection District (CCCFFPD) and/or the Contra Costa County Health Services Department, Division of Environmental Health. This measure would reduce the impact to a less-than-significant level.

#### b. Other Hazardous Materials

No additional mitigation is required beyond continuation of the hazardous materials handling and storage practices currently employed by the medical center, and continued compliance with applicable federal, state, and local regulations.

#### c. Hazardous Wastes

The increased quantities of infectious, chemotherapy, chemical, and radioactive wastes would not require specific additional mitigation measures beyond continuation of handling, storage, and disposal practices currently employed by the medical center, and continued compliance with applicable federal, state, and local regulations.

#### d. Potential Soil/Groundwater Contamination

(1) Underground Storage Tanks. **(HS Impact 3)** As a condition of future Use Permit approval, require the project applicant to indicate in text and map form the location of all existing underground storage tanks on the project site, and demonstrate compliance with applicable Regional Water Quality Control Board protocols for maintenance and remediation. This measure would reduce the identified impact potential to a less-than-significant level.

**e. Cumulative Impacts**

No significant impacts have been identified; no mitigation is required.





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## H. SOILS, GEOLOGY, AND SEISMICITY

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This section describes existing soils, geologic, and seismic conditions in the project area, the potential implications of the proposed Master Plan related to these conditions, and measures warranted to mitigate potentially significant impacts.

### 1. SETTING

#### a. Soil and Geologic Conditions

The project site is located on the northeast limb of the Walnut Creek syncline, a major geologic feature bordered on the west by the Calaveras Fault, on the southeast by Mt. Diablo, and on the east by the Concord Fault. The syncline is formed by folding of the rock layers downward into a U-shaped structure, with the axis of the fold trending in a northwest-southeast direction. A regional map compiled by the United States Geological Survey (USGS) indicates that the syncline is comprised of a sequence of sandstone units of Tertiary Age (Contra Costa County, 1976). These beds are overturned in most of the area surrounding the project site and dip eastward.<sup>1</sup>

The following discussion reviews the related geologic features of the three main subareas of the project site: (1) the Main Campus Site, (2) the La Casa Court Site, and (3) the 230 La Casa Via Site.

(1) Main Campus Site. The Main Campus Site, which is partially developed with the existing medical center and associated parking lots, was originally a hillside that sloped gently down to the east toward a draw. Considerable grading was required during the Phase I construction to develop the site. Cuts were made in the western portion of the site, and the excavated material was used to fill the downhill eastern portion. The most noticeable topographic feature on the site is a 25-foot-high undeveloped hillock to the north of the main hospital building.<sup>2</sup>

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<sup>1</sup>Larry Seeman Associates, Inc., Final Environmental Impact Report, John Muir Memorial Hospital, Phase III Expansion, prepared for the city of Walnut Creek, February 1986, page 38; and County of Contra Costa, Draft Environmental Impact Report, Perma-Bilt General Plan Amendment, County File #4-86-CO, July 1987, page 80.

<sup>2</sup>Woodward-Clyde Consultants, Geotechnical Study, Phase III Expansion and Phase IV Exploration, John Muir Memorial Hospital, Walnut Creek, California, 1985, page 5.

Bedrock underlying the site consists primarily of soft to medium-hard sandstone and siltstone, which is weakly cemented and slightly weathered near the bedrock surface. The USGS map of this area indicates that this bedrock is of the Sobrante Formation, which is of Miocene Age (Contra Costa County, 1976).<sup>1</sup>

According to U.S. Soil Conservation Service maps, the site is within the following soil mapping units:

- *Alo clay (AaE)*. Alo clay is common on smooth, hilly uplands. The depth to soft shale and sandstone is 30 to 40 inches. Small amounts of Diablo clay are found along the lower slopes. Runoff is medium and, where the soil is bare, erosion hazard is moderate. The soil is well-drained, permeability is slow, and the available water capacity is 3.5 to 9 inches.
- *Lodo clay loam (LcF)*. This mapping unit has medium to rapid runoff, and erosion hazard is moderate to high where the soil is bare. The surface layer is loamy sand to clay.

Both the Alo series and the Lodo series are rated with severe constraints for the development of roads and streets, dwellings without basements, and sanitary landfill. They are also rated as poor for topsoil and road fill.<sup>2</sup>

(2) La Casa Court Site. The La Casa Court Site has been graded and road and other improvements have been installed to serve a nine-lot single-family subdivision; no building construction has occurred on the site, however. A foundation investigation prepared for the proposed subdivision found that surficial soils consists of stiff silty and sandy clays that have a high expansion (shrink-swell) potential. The surficial soils are underlain by various layers of firm to hard silts and clays, as well as dense sands. These soil layers are followed by moderately weathered, soft to moderate hardness, siltstone and sandstone bedrock.<sup>3</sup>

Geologic maps of the area indicate that the majority of the surficial soils on this site are underlain by Sobrante sandstone, although some Domingue Formation sandstone may be present in the knoll area at the northeast corner of the site. Both of these materials are of marine origin. The Sobrante sandstone was likely deposited during the Miocene Age, while the Domingue sandstone was deposited during the Eocene Age.<sup>4</sup>

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<sup>1</sup>Larry Seeman Associates, Inc., Final Environmental Impact Report, John Muir Memorial Hospital, Phase III Expansion, prepared for the city of Walnut Creek, February 1986, page 38.

<sup>2</sup>Ibid, page 39.

<sup>3</sup>Alan Kropp & Associates, Foundation Investigation, 9-Unit Subdivision, Walnut Creek, California, prepared for Corvey Development Corp., September 7, 1979, page 3.

<sup>4</sup>Ibid., page 4.

According to U.S. Soil Conservation Service maps,<sup>1</sup> the site is within the following soil mapping units:

- *Alo clay (AaE)*. (See description under "(1) Main Campus Site" above.) The front (southwestern) portion of the site is located within this mapping unit.
- *Lodo clay loam (LcE)*. This mapping unit has medium runoff, and erosion hazard is moderate where the soil is bare. The surface layer and subsoil is loam, loamy sand, gravelly clay loam, clay loam, silty clay loam, and clay. The rear (northeastern) portion of the site is located within this mapping unit.

As noted above, both the Alo series and the Lodo series are rated with severe constraints for the development of roads and streets, dwellings without basements, and sanitary landfill. They are also rated as poor for topsoil and road fill.<sup>2</sup>

(3) 230 La Casa Via Site. The 230 La Casa Via Site, which is currently undeveloped, but previously contained a single-family house, is located on the gentle slopes of Shell Ridge. The site varies in elevation from 280 feet in the southwestern corner to 205 feet in the northwestern corner on La Casa Via. The gradient of the slope is five to ten percent except at the southwestern corner, where the slope increases to 15 to 20 percent.<sup>3</sup>

The upper portion of the site on La Casa Via is underlain by Tertiary Miocene sedimentary bedrock units that are about 15 million years old. Quaternary alluvium overlays the bedrock at the lower portion of the site along La Casa Via.

According to U.S. Soil Conservation Service soil maps (1977), the site is within the Alo clay (AaE) mapping unit, which usually occurs on steeper (15 to 30 percent) slopes. The depth to soft shale and sandstone is 30 to 40 inches. Small amounts of Diablo clay (ten percent), Crupley clay (three percent), and Clear Lake clay (two percent) are included in areas mapped as Alo clay along the lower slopes. Runoff is medium and, where the soil is bare, erosion hazard is moderate. The soil is well-drained, permeability is slow, and the available water capacity is 3.5 to 9 inches.<sup>4</sup>

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<sup>1</sup>U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of Contra Costa County, California, September 1977, map 34 and pages 31 and 62.

<sup>2</sup>Larry Seeman Associates, Inc., Final Environmental Impact Report, John Muir Memorial Hospital, Phase III Expansion, prepared for the city of Walnut Creek, February 1986, page 39.

<sup>3</sup>County of Contra Costa, Draft Environmental Impact Report, Perma-Bilt General Plan Amendment, County File #4-86-CO, July 1987, page 80.

<sup>4</sup>Ibid.



## **b. Seismicity**

(1) Ground Shaking. The project site lies within the seismically active San Francisco Bay region. At least seven active faults within the Bay Area could cause damage on the project site in the event of a strong earthquake: (a) the Hayward Fault, located approximately 11 miles to the west; (b) the Calaveras Fault, the most active portion of which terminates about nine miles to the south; (c) the Concord Fault, located approximately two miles to the east; (d) the Antioch Fault, located approximately 12 miles to the east; (e) the Marsh Creek-Greenville Fault, located approximately ten miles to the southeast; (f) the Green Valley Fault, located approximately 12 miles to the northwest; and (g) the San Andreas Fault, located about 32 miles to the west. Poland (1935) has also postulated the presence of a fault along the northeast side of the ridge on which the existing medical center is situated, but its existence has not been proven.<sup>1</sup>

Strong ground shaking on the project site is likely during seismic events generated by nearby faults. The intensity of onsite ground shaking would depend on many factors, including earthquake magnitude, distance to the causative fault, and thickness of the soil deposit over bedrock. A common measure of the potential for damage due to earthquake ground shaking at a particular location is the "Modified Mercalli Intensity" scale. Maps prepared by the Association of Bay Area Governments (ABAG) depict ground shaking intensity potentials in various Bay Area cities, using the Modified Mercalli Intensity scale. ABAG map information on hazards from earthquakes on faults in the project site vicinity are shown in Table 29. The table indicates that expected damage in the project vicinity ranges from a value of VI ("objects fall") to IX ("heavy damage"), depending on the magnitude of the earthquake and the fault on which it originates. Ground shaking amplification in the vicinity of the project site is rated "moderately low to low."<sup>2</sup>

(2) Surface Rupture. Ground surfaces can rupture in the vicinity of earthquake faults. Surface rupture is usually confined to a narrow zone bordering an active fault. Surface rupture is considered unlikely on the project site, since no known active faults are located within or near the project site boundaries.

(3) Other Effects. A moderate to strong earthquake can also cause secondary geologic effects, such as slope failure, landslides, lurching, liquefaction, and differential compaction, or settlement. Other earthquake-related hazards can include flooding due to damage to upstream water storage facilities.

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<sup>1</sup>Larry Seeman Associates, Inc., Final Environmental Impact Report, John Muir Memorial Hospital, Phase III Expansion, prepared for the city of Walnut Creek, February 1986, pages 38-39; and County of Contra Costa, Contra Costa County General Plan 1990-2005, January 1991, Figure 10-2.

<sup>2</sup>Association of Bay Area Governments, "On Shaky Ground - City Maps," City of Walnut Creek, Publication Number P95002EQKC17

Table 29

MODIFIED MERCALLI INTENSITY SCALE RATINGS IN PROJECT SITE VICINITY

<u>Earthquake Fault</u>	<u>MMI* Value</u>	<u>Summary Damage Description**</u>
Northern Calaveras	VI to VII	"objects fall" to "nonstructural damage"
Concord/Green Valley	VIII to IX	"moderate damage" to "heavy damage"
Hayward	VI to VII	"objects fall" to "nonstructural damage"
Northern Hayward	VI to VII	"objects fall" to "nonstructural damage"

SOURCE: Association of Bay Area Governments, "On Shaky Ground - City Maps," City of Walnut Creek, Publication Number P95002EQKC17

\*MMI: Modified Mercalli Intensity

\*\*Full damage descriptions are as follows:

VI ("Objects Fall"): Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc. off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells rung (church, school). Trees, bushes shaken visibly, or heard to rustle.

VII ("Nonstructural Damage"): Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments). Some cracks in masonry C. Waves on ponds, water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.

VIII ("Moderate Damage"): Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.

IX ("Heavy Damage"): General panic. Masonry D destroyed, masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. (General damage to foundations.) Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluvial areas sand and mud ejected. Earthquake fountains; sand craters.

Slope failure on the project site due to earthquakes is considered unlikely because of the presence of bedrock at shallow depths. There is also a low potential for landslides, lurching, liquefaction, differential compaction, or settlement, due to the site's generally low topographic relief, gentle slopes, shallow bedrock depth, and very stiff natural clayey soils.<sup>1</sup>

The project site is not located downslope or downstream of any water retention facility of significant size. Therefore, the hazard from earthquake-induced flooding caused by failure of this type of facility is non-existent.<sup>2</sup>

(4) Seismic Safety Requirements for Hospitals. The design and construction of hospitals in California is governed by the California Code of Regulations, Title 24, Part 2, which is administered by the Office of Statewide Health Planning and Development (OSHPD). Title 24, Part 2 consists primarily of the Uniform Building Code (UBC) with amendments by the State of California. In addition, the State of California Hospital Seismic Safety Act of 1983 requires submittal of geologic, seismic, and geotechnical data to OSHPD to ensure that geologic hazard analysis and design criteria are accurate, complete, and reflect state-of-practice knowledge so that hospital structures are properly sited and designed.

Senate Bill (SB) 1953, adopted by the California State Senate in 1994, established new seismic safety requirements for hospitals, stipulating that buildings that do not meet current seismic standards not include in-patient functions, such as nursing units, surgery, anaesthesia, dietary functions, radiology, laboratories, and pharmacies. The regulations that will implement SB 1953 are due to be completed by June of 1997. Once the regulations are completed, hospitals will be allowed three years to submit a plan indicating how they will comply with the law's requirements. It is anticipated that hospitals will be required to evaluate existing buildings and place them into one of three categories: (a) Category I, consisting of buildings of high quality construction that comply with the Hospital Seismic Safety Act of 1983; (b) Category II, consisting of buildings designed under seismic safety regulations that were in effect in 1973; and (c) Category III, consisting of buildings that do not comply with the 1973 regulations and that would most likely not be capable of serving patients in the event of a major earthquake on a nearby fault. OSHPD will administer the regulations currently being drafted to implement SB 1953.<sup>3</sup>

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<sup>1</sup>Larry Seeman Associates, Inc., Final Environmental Impact Report, John Muir Memorial Hospital, Phase III Expansion, prepared for the city of Walnut Creek, February 1986, page 40; and County of Contra Costa, Draft Environmental Impact Report, Perma-Bilt General Plan Amendment, County File #4-86-CO, July 1987, page 80.

<sup>2</sup>Ibid.

<sup>3</sup>Telephone conversations with Dave Thistlethwaite, Thistlethwaite Architectural Group (John Muir Medical Center project architect), February 12, 1996; and John Ruffo, Gordon H Chong and Associates, February 14, 1996.



Once the new regulations are completed, John Muir Medical Center anticipates conducting structural engineering surveys to categorize the existing medical center buildings in accordance with the new requirements. It is anticipated that the Phase III building, which was designed to comply with the Hospital Seismic Safety Act of 1983, will be considered a Category I building. The Phase II building, which was constructed in 1972 but designed in anticipation of the new seismic requirements adopted in 1973, is expected to be classified as either a Category I or Category II building. The Phase I building is expected to be classified as either a Category II or Category III building. It is therefore possible that in-patient functions in the Phase I building, which include two nursing units, a dietary unit, some radiology operations, and a pharmacy, will have to be relocated. Alternatively, the Phase 1 building could be seismically strengthened or demolished.<sup>1</sup>

## 2. IMPACTS

### a. Significance Criteria

Based on CEQA Guidelines,<sup>2</sup> the project would have a *significant adverse geotechnical impact* if it would:

1. Expose people or structures to major geologic hazards, such as fault rupture, seismic ground shaking, seismic ground failure (including liquefaction), landslides, land subsidence, or expansive soils (CEQA Guidelines, Appendix G, Item r, and Appendix I, Items III(a), (b), (c), (e), (g), and (h)); or
2. Cause substantial erosion or siltation (CEQA Guidelines, Appendix G, Item q).

This EIR uses these criteria to evaluate the potential geotechnical impacts of the proposed Master Plan.

### b. Soil and Geologic Impacts

(1) Soil Conditions. The Master Plan would allow construction of buildings and paved areas on moderately expansive clay surfaces that could cause slight differential movement of large building foundations and cracking of concrete slabs and pavements during seasonal changes in soil moisture content. Such movement and resultant cracking of slabs and pavements could result in substantial and costly damage to onsite improvements, constituting a *potentially significant impact (G Impact 1)* (see item 1 under "a. Significance Criteria" above).

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<sup>1</sup>Thistlethwaite.

<sup>2</sup>State of California, Governor's Office of Planning and Research, Guidelines for Implementation of the California Environmental Quality Act, 1995.

(2) Erosion Potential. Development in accordance with the Master Plan is likely to involve grading that would disrupt and displace site soils, increasing the potential for temporary water and wind erosion of graded soil. Eroded soil may enter the city's storm sewer system, impairing water quality. This issue is addressed in section IV.I, Drainage and Water Quality.

### **c. Seismic Impacts**

The Master Plan would allow construction of new buildings and other facilities, thereby increasing the number of people exposed to earthquake hazards on the site, particularly hazards during ground shaking. The project site is located in a region of high seismic activity. Large, destructive earthquakes have occurred in the past, and more are very likely to occur in the future. It is estimated that within the next 30 years, there is a 67-percent probability of one or more large earthquakes occurring in the San Francisco Bay region.

(1) Fault Rupture. The primary effect of a large earthquake along an active fault could be ground rupture along the fault trace. The likelihood of ground rupture at the site due to faulting is considered low and would not represent a significant impact.

(2) Ground Shaking. Most historic earthquake damage in the region has been due to ground shaking and its secondary effects, including ground failure and fire damage, rather than fault rupture.

Ground shaking refers to the horizontal and vertical motions associated with an earthquake. The magnitude, duration, and frequency of ground motions are influenced by (1) the magnitude of the earthquake, (2) the properties and thickness of the subsurface materials at the site, and (3) the distance between the site and rupture fault plane.

The entire San Francisco Bay Area is subject to some level of damage impact due to ground shaking from earthquakes. It is highly probable that the proposed project could be subjected to severe ground motion at some point during its economic life. Significant shaking at the site would be induced if a moderate to large earthquake were to occur along either the seven identified active faults, or along the Hayward or other faults in the area. The intensity of the seismically-induced ground shaking would be a direct result of the distance from the epicenter and the magnitude of the quake. According to ground shaking maps prepared by the Association of Bay Area Governments (ABAG), significant damage can be expected to occur (see Table 29 above). In the event of ground shaking intensities stronger than those anticipated by ABAG, or if ground shaking triggers a fire, the damage could be greater.

Based on these earthquake damage potentials, the project is located within Seismic Zone 4 of the Uniform Building Code (UBC), which requires the highest level of earthquake resistance in the design of structures. Furthermore, UBC requirements for the design and construction of hospitals, and associated state amendments, are administered by the Office of Statewide Health Planning and Development (OSHPD) and the city: The State Hospital Seismic Safety Act of 1993 requires submittal of geologic, seismic, and geotechnical data to the OSHPD to

ensure that hospital project geologic hazard analysis and design criteria are accurate, complete, and reflect state-of-practice knowledge so that hospital structures are properly sited and designed. Required compliance with these stringent codes and procedures, and with any subsequent regulatory updates established over the approximately 20-year Master Plan buildout period, would be expected to reduce the ground-shaking impacts of the Master Plan to levels of acceptable risk.

### **3. MITIGATIONS**

#### **a. Soil and Geologic Impacts**

(1) Soil Conditions. (***G Impact 1***) At the time that a Use Permit application for subsequent development on any portion of the project site is submitted, require the project applicant to commission a preliminary report indicating whether the proposed development location is suitable and appropriate, from a geotechnical standpoint, for the proposed use. At the time of Building Permit application, require the project applicant to commission a site-specific geotechnical study prepared by a registered engineering geologist for proposed new construction that recommends proper foundation systems and proper subgrade treatment. Implementation of this measure would reduce the impact to a less-than-significant level.

(2) Erosion Potential. (See section IV.I, Drainage and Water Quality.)

#### **b. Seismic Impacts**

No additional mitigation beyond compliance with state and city seismic construction requirements would be necessary to mitigate potential structural damage impacts due to ground shaking.





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## I. DRAINAGE AND WATER QUALITY

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This section describes (1) existing storm drainage and water quality characteristics of the project site and environs, (2) the potential impacts of project buildout under the proposed John Muir Medical Center Master Plan on these conditions, and (3) measures necessary to mitigate potentially significant adverse effects.

### 1. SETTING

#### a. Existing Storm Drainage Characteristics

(1) Drainage Patterns. The project site is located on the gentle northeast slope of Shell Ridge. Runoff from the area naturally flows northeastward into Ygnacio Valley and then northward, eventually into Walnut Creek.<sup>1</sup> The site is not located within a designated 100-year flood zone, according to the city's General Plan.<sup>2</sup>

The project site is served by city storm sewers, which are separate from the sanitary sewer system. Site runoff is collected in surface and subsurface drainage structures and conveyed to one of three subsystems of the city's municipal storm drainage network (see Figure 40): (a) the San Miguel Park drainage system, (b) the San Carlos Drive system, or (c) the Los Altos Avenue system. The system is designed to minimize runoff discharges into the Ygnacio Canal, which is owned by the Contra Costa Water District and is located adjacent to the northern boundaries of the Main Campus Site, La Casa Court Site, and Schulze Property.<sup>3</sup> Some undeveloped portions of the project site do drain into the canal, however.

Drainage patterns for subareas of the project site are as follows:

- **Main Campus Site:** Runoff collects at various points in La Casa Via and along the eastern and southern boundaries of the site, and is conveyed either via Los Cerros Avenue/Los Altos Avenue storm sewers or via Ygnacio Valley Road/Los Altos Avenue

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<sup>1</sup>Larry Seeman Associates, Inc., Final Environmental Impact Report, John Muir Memorial Hospital Phase II Expansion, prepared for the City of Walnut Creek, February 1986, page 42.

<sup>2</sup>City of Walnut Creek, 1989 General Plan, Figure 6-3 (Flood Zones), page 6-19.

<sup>3</sup>Telephone conversation with Tim Tucker, Assistant Engineer, city of Walnut Creek Community Development Department, Current Development Section (Clean Water Program), February 9, 1996; and Catherine Walters, Associate Civil Engineer, city of Walnut Creek Public Works Department, February 12, 1996.





storm sewers into the main Los Altos Avenue storm sewer. Runoff in the southeastern portion of the Main Campus Site drains into an 18-inch reinforced concrete pipe that follows the southeastern property line, crosses under Ygnacio Canal, and runs northward under Los Cerros Avenue (see Figure 40). Runoff from the northern portion of the Main Campus Site drains into an 18-inch reinforced concrete pipe that drains northeastward along Ygnacio Valley Road, eventually joining flow from the Los Cerros pipe at Los Altos Avenue, where both flows merge into a 33-inch northeasterly-flowing storm sewer.

Runoff from a small unimproved portion of the Main Campus Site that abuts the south side of the Ygnacio Canal drains into the canal.<sup>1</sup>

- **La Casa Court Site/Schulze Property:** Most runoff from the La Casa Court and Schulze properties collects in the La Casa Court storm drainage system and is conveyed in the San Miguel Park storm sewer. However, runoff from a small strip of slope between the subdivided land and the Ygnacio Canal may still drain into the canal. Similarly, runoff from a small area between the Schulze Property house and the canal drains into the canal.<sup>2</sup>
- **230 La Casa Via Site:** Runoff from the 230 La Casa Via Site collects in a catch basin on the northeast property line along La Casa Via, and is conveyed via surface and sub-surface structures to the San Miguel Park storm sewer.<sup>3</sup>

As shown in Figure 40, flows from all of these local drainages combine at San Carlos Drive and Los Altos Avenue. From here, the runoff is conveyed to Ygnacio Valley Road, then to an open channel at Heather Farms Park to the west. The runoff then drains into a culvert under the Contra Costa Canal, which leads to the Walnut Creek Channel and eventually to San Francisco Bay.

(2) Storm Drain Capacity. The storm drains on the project site and in the vicinity are of adequate size to serve existing and anticipated future development except the storm sewer line under San Carlos Drive extending from Los Cerros Avenue to Los Altos Avenue (see Figure 40). This line has not been large enough to accommodate runoff during past peak

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<sup>1</sup>Larry Seeman Associates, Inc., Final Environmental Impact Report, John Muir Memorial Hospital Phase II Expansion, prepared for the City of Walnut Creek, February 1986, page 42.

<sup>2</sup>Telephone conversation with Catherine Walters, Associate Civil Engineer, city of Walnut Creek Public Works Department, February 12, 1996.

<sup>3</sup>Contra Costa County, Draft Environmental Impact Report, Perma-Bilt General Plan Amendment, County File #5-86-CO, July 1987, page 64.

storms. However, resulting overflow has historically been contained in the street, and the city has not received any reports of associated flooding of houses or commercial property.<sup>1</sup>

(3) Pipe Damage. City staff has indicated that sulphur springs in the project area may be causing deterioration of storm drainage pipes under Ygnacio Valley Road and possibly in other areas. To date, a deteriorated pipe in Ygnacio Valley Road from Kinross Drive to Marchbank Drive has been replaced in response to this problem. The city is planning to conduct a more thorough inventory of the storm drain system in this area to determine the extent of this problem. The study area will extend from La Casa Via to San Carlos Drive and from Ygnacio Valley Road to Las Lomas Way. The inventory is scheduled to be completed by January 1, 1997.<sup>2</sup>

#### **b. Water Quality**

(1) Local Water Pollution Sources. The types of water pollutants produced by an urban area are highly variable and depend upon land use, rainfall intensity, and the duration of dry weather periods prior to rainfall events. The level of pollutants found in urban surface runoff tends to vary throughout the year. Rapid runoff during storms, particularly during the first rainfall event of the year after an extended dry period, may generate "pulses" of polluted water that quickly pass through the storm drain system. Runoff in the wetter months that follow may contain higher suspended sediment concentrations and turbidity as a result of erosion. Consequently, the later runoff tends to be higher in concentrations of bacteria, trace metals, and nutrients. During dry weather periods, the quality of surface runoff may be affected by upstream spills or leakage of chemicals, irrigation runoff, wash-down of pavements, or leakage from sanitary sewers.

On the project site, the main sources of potential water pollution consist of materials and chemicals that are washed into the storm drainage system from parking lots, building surfaces, and landscaped areas. These materials can consist of oil and grease from automobiles; heavy metals found in vehicle exhaust; weathered paint; landscape materials and products (pesticides, herbicides, and fertilizers); metals from unpainted galvanized gutters, vents, and roof-mounted equipment; and other constituents that accompany local urban land uses. Sulphur from an underground spring beneath the site also contributes to water quality problems in the project area.<sup>3</sup>

(2) Existing Water Quality Programs and Regulations. Water quality in California is regulated by the U.S. Environmental Protection Agency's National Pollutant Discharge

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<sup>1</sup>Telephone conversation with Catherine Walters, Associate Civil Engineer, city of Walnut Creek Public Works Department, December 22, 1995.

<sup>2</sup>Walters, December 22, 1995.

<sup>3</sup>Ibid.

Elimination System (NPDES), which controls the discharge of pollutants to water bodies from point and non-point sources. In Walnut Creek, the San Francisco Bay Area Regional Water Quality Control Board (RWQCB) administers this program. Federal regulations issued in November 1990 expanded the RWQCB's authority to include permitting of stormwater discharges from municipal storm sewer systems, some industrial activities, and construction sites that disturb areas larger than five acres.

As mandated by NPDES permit regulations, applicants for projects that will disturb areas larger than five acres must notify the RWQCB by filing a Notice of Intent (NOI). The applicant must then develop a *Storm Water Pollution Prevention Plan* (SWPPP) and pay a fee prior to start of construction. For use in preparing SWPPPs, the State Water Quality Control Board has published the California Storm Water Best Management Practices Handbook (March 1993) that recommends measures for reducing storm water pollution from construction activities.

## 2. IMPACTS

### a. Significance Criteria

Based on CEQA Guidelines,<sup>1</sup> the project would have a *significant adverse drainage or water quality impact* if it would:

1. Expose people or structures to substantial new or increased flooding (in the case of the proposed project, this could result from substantial changes in the rate and volume of storm water runoff leaving the site);
2. Result in a noticeable loss of flood-carrying capacities within downstream storm drain facilities and receiving waters;
3. Result in a substantial degradation of surface or groundwater quality; or
4. Substantially interfere with groundwater recharge.

In the case of the proposed project, the fourth criterion (interference with groundwater recharge) is not an issue, since the project site does not serve as a major recharge source to the local groundwater basin, local groundwater supplies are not currently used as a primary water supply source, and the State of California has not designated Walnut Creek as a groundwater recharge area. Therefore, the impact analysis that follows focuses on the

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<sup>1</sup>State of California, Governor's Office of Planning and Research, Guidelines for Implementation of the California Environmental Quality Act, 1995, Appendix G, Items f-i and Item q.



potential for the development plan to adversely affect local surface drainage characteristics, associated downstream storm drain facility capacities, and downstream water quality.

#### **b. Storm Drainage Impacts**

Development in accordance with the proposed Master Plan would increase the amount of impervious surface on the project site, thereby altering local drainage patterns and increasing the amount and rate of runoff flowing into the city's local storm sewer system. Development of the La Casa Court Site and 230 La Casa Via Site may contribute additional runoff to the portion of the system that drains into the San Carlos Drive storm sewer, which is already operating above capacity. The project thus has the potential to contribute to existing drainage problems in this area. The project may also increase runoff draining into portions of the system that have deteriorated due to sulphur infiltration from an underground spring. This increase in runoff, and the resulting overload on portions of the city's storm sewer system, represent a *potentially significant impact (D Impact 1)* (see Criteria 1 and 2 under "a. Significance Criteria" above).

#### **c. Water Quality Impacts**

(1) Impacts During Construction. Construction in accordance with the Master Plan is likely to involve substantial grading, particularly on currently undeveloped portions of the project site (e.g., the La Casa Court and 230 La Casa Via Sites). Although the site occupies gently sloping terrain, there is a threat of increased soil erosion from soil disturbance associated with construction. Site grading would remove the existing vegetative cover, exposing bare soil to increased erosion from rain. Eroded soil contains nitrogen, phosphorus, and other nutrients that, when carried into surface waters, can trigger algal blooms that reduce water clarity, deplete oxygen, and create odors. Excessive sediment could also be deposited in onsite storm drains and in downstream drainage facilities, decreasing their capacity. Other construction activities, including vehicle maintenance, paving, concrete work, and use of construction materials such as paint and other petroleum-based products, may also produce pollutants that could enter the storm sewer system. These possible effects of project construction represent a *potentially significant impact (D Impact 2)* (see Criteria 2 and 3 under "a. Significance Criteria" above).

(2) Impacts From Project Operations. The quality of stormwater runoff from the project site would be expected to decline as a result of the increase in surface urban pollutants associated with the medical center expansions proposed by the Master Plan. These surface urban pollutants could include debris, landscaping fertilizers and pesticides, and road and automotive waste as described in the "Setting" subsection above. These added pollutants could flow into the city's storm sewer system, and eventually into the San Francisco Bay, where they could contribute to a cumulative degradation of water quality. The effect would represent a *potentially significant cumulative adverse impact (D Impact 3)* (see Criterion 3 under "a. Significance Criteria" above).

### 3. MITIGATIONS

#### a. Storm Drainage Impacts

**(D Impact 1)** To mitigate impacts on the city's storm drainage system, require the project applicant to:

- As a condition of any future subdivision map or Use Permit approvals for future development within the Master Plan boundary, require submittal of *detailed drainage plans* to the city for the area to be developed. All onsite surface drainage shall be collected and conveyed in an adequately designed underground storm drainage system to an approved point of discharge in a manner approved by the City Engineer. The city may also require the applicant to prepare a study of the downstream drainage system if the project drainage plans propose alteration of the tributary area to existing drainage discharge points. The city may also require the applicant to contribute an in-lieu fee to be applied toward the upgrading of the system if warranted by the amount of runoff the project would contribute to the system.
- As a condition of future subdivision map or Use Permit approval within the Master Plan boundary, require an analysis of onsite private storm drainage lines that will receive project runoff to determine the extent of their deterioration due to sulphur infiltration. If city-maintained lines have to be replaced, the city shall require the project applicant to share in the cost of construction. The applicant's share of this cost would be calculated based on the quantity of flow from the project site as compared with the quantity from other properties. If public or private storm drainage lines have deteriorated due to sulphur infiltration and are inadequate to contain additional drainage from the project, the applicant shall pay the cost of replacement.

Assuming the applicant complies with these measures as required by the city, the project's storm drainage impact would be mitigated to a less-than-significant level.

#### b. Water Quality Impacts

**(1) Impacts During Construction.** **(D Impact 2)** To mitigate impacts due to soil erosion during construction, require the applicant to comply with the San Francisco Bay Area Regional Water Quality Control Board's National Pollutant Discharge Elimination System (NPDES) Construction Storm Water General Permit Requirements. The applicant shall submit copies of the required Notice of Intent (NOI) and *Storm Water Pollution Prevention Plan* (SWPPP) to the City Engineer prior to construction on any portion of the project site, and implement the SWPPP during construction. The SWPPP shall, at a minimum, follow the State Water Quality Control Board's California Storm Water Best Management Practices Handbook (March 1993), the city's Grading and Erosion Control ordinances, and other generally accepted engineering practices for erosion control.

To address the erosion effects of any proposed grading, the preparer of the SWPPP shall consider including the following provisions:

- Existing vegetated areas shall be left undisturbed until construction of improvements on each portion of the project site is actually ready to commence.
- To the extent possible, major site development work involving earth moving and excavation shall be scheduled for the dry season. If grading is to be conducted in winter, an approved erosion control plan shall be implemented prior to October 15th. All finished grade slopes shall be protected from erosion.
- Measures necessary to protect downstream storm drainage lines from sedimentation shall be implemented.
- Silt fencing shall be used where necessary to retain sediment on the project site.
- All disturbed areas shall be immediately revegetated or otherwise protected from wind and water erosion upon completion of grading activities. All finished grade slopes shall be protected from erosion.

These measures would reduce the water quality impacts of project construction to a less-than-significant level.

(2) Impacts from Project Operations. **(D Impact 3)** To mitigate impacts of future project operations on water quality, require the applicant to submit copies of the Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) described in the mitigation for *D Impact 2* above to the City Engineer and implement the SWPPP in project operations.

At a minimum, the SWPPP shall (a) identify specific types and sources of stormwater pollutants, (b) determine the location and nature of potential impact, and (c) specify appropriate control measures to eliminate any potentially significant impacts to receiving water quality from stormwater runoff. Control measures may include vegetated buffer strips, site development restrictions, public education, street/parking lot sweeping, and other design or source control management practices, as appropriate, to mitigate potential water quality effects. This measure would reduce the impact to a less-than-significant level.



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## J. AIR QUALITY

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This EIR section describes the impacts of the project on local and regional air quality. The analysis has been prepared using methodologies and assumptions recommended within the air quality impact assessment guidelines of the Bay Area Air Quality Management District.<sup>1</sup> In keeping with these guidelines, this section describes existing air quality, construction-related impacts, direct and indirect emissions associated with the project and the impacts of these emissions on both the local and regional scale, and mitigation measures warranted to reduce or eliminate any identified significant impacts.

### 1. SETTING

#### a. Air Pollution Climatology

The project area climate is typical of sheltered inland locations in California. Daytime temperatures in summer average near 80 degrees F. Summer diurnal range is high, with temperatures dropping to the low 50's by morning. Daytime temperatures in winter vary little from the more coastward locations with maximums in the mid-50's. Winter minimums, however, are some ten degrees lower on the average than stations on the coast, with morning temperatures in the low to middle 30's. Sunshine is plentiful in summer, with clear skies most of the time.

The pollution potential in the project area is relatively high compared to other portions of the Bay Area. Abundant sunshine and warm temperatures in summer are ideal conditions for the formation of photochemical oxidant, and the East Bay valleys are a frequent scene of photochemical pollution even in the absence of local sources, due to sea breeze transport of contaminants from westward urban areas. During the winter months the conditions associated with buildups of carbon monoxide (calm winds, cold temperatures) are relatively frequent.

#### b. Air Pollutants and Ambient Standards

Both the U.S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards identify safe levels of contaminants that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called

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<sup>1</sup>Bay Area Air Quality Management District, Air Quality and Urban Development- Guidelines for Assessing Impacts of Projects and Plans, June 1985.

"criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. Table 30 identifies the major "criteria" pollutants, characteristics, health effects and typical sources in the project subarea.

Table 31 summarizes federal and State of California ambient air quality standards for important pollutants. The federal and state ambient standards were developed independently with differing purposes and methods, although the basic intent of both processes is to avoid health-related effects. The federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and PM-10.

As explained above, the pollutants covered under the above-described legislation are known as "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. Another group of substances, known as Toxic Air Contaminants (TACs), are injurious in small quantities and are regulated despite the absence of criteria documents. The identification, regulation and monitoring of TACs is relatively recent compared to that for criteria pollutants.

### **c. Local Air Pollution Sources**

(1) Criteria Pollutants. A review of major sources of "criteria" pollutants revealed none near the project site.<sup>1</sup>

(2) TACs. The Toxic "Hot Spots" Information and Assessment Act (Assembly Bill 2588), enacted in 1987, required the Bay Area Air Quality Management District to develop information on TAC emissions and resulting health risks. A review of TAC sources revealed no major or priority sources of TACs in the immediate vicinity of the project site.<sup>2</sup>

John Muir Medical Center does use ethylene oxide to sterilize equipment that cannot be steam-sterilized. Ethylene oxide is a Toxic Air Contaminant regulated by the Bay Area Air Quality Management District. The BAAQMD calculates annual ethylene oxide emissions from John Muir Medical Center as less than 2.1 pounds per year. This emission is well below the threshold requiring preparation of a health risk assessment.<sup>3</sup>

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<sup>1</sup>Bay Area Air Quality Management District, Base Year 1990 Emission Inventory Summary Report, October 1993.

<sup>2</sup>Bay Area Air Quality Management District, Toxic Air Contaminant Control Program Annual Report 1994 Volume II, 1995.

<sup>3</sup>Bay Area Air Quality Management District, Toxic Air Contaminant Control Program Annual Report 1994 Volume II, 1995.

Table 30  
MAJOR CRITERIA POLLUTANTS

<u>Pollutant</u>	<u>Characteristics</u>	<u>Health Effects</u>	<u>Major Sources</u>
Ozone	A highly reactive photochemical pollutant created by the action of sunshine on ozone precursors (primarily reactive hydrocarbons and oxides of nitrogen. Often called photochemical smog.	<ul style="list-style-type: none"> <li>▪ Eye Irritation</li> <li>▪ Respiratory function impairment.</li> </ul>	The major sources ozone precursors are combustion sources such as factories and automobiles, and evaporation of solvents and fuels.
Carbon Monoxide	An odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels.	<ul style="list-style-type: none"> <li>▪ Impairment of oxygen transport in the bloodstream.</li> <li>▪ Aggravation of cardiovascular disease.</li> <li>▪ Fatigue, headache, confusion, dizziness.</li> <li>▪ Can be fatal in the case of very high concentrations.</li> </ul>	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide	Reddish-brown gas that discolors the air, formed during combustion.	<ul style="list-style-type: none"> <li>▪ Increased risk of acute and chronic respiratory disease.</li> </ul>	Automobile and diesel truck exhaust, industrial processes, fossil-fueled power plants.
Sulfur Dioxide	A colorless gas with a pungent, irritation odor.	<ul style="list-style-type: none"> <li>▪ Aggravation of chronic obstruction lung disease.</li> <li>▪ Increased risk of acute and chronic respiratory disease.</li> </ul>	Diesel vehicle exhaust, oil-powered power plants, industrial processes.
PM-10	Solid and liquid particles of dust, soot, aerosols and other matter that are small enough to remain suspended in the air for a long period of time.	<ul style="list-style-type: none"> <li>▪ Aggravation of chronic disease and heart/lung disease symptoms.</li> </ul>	Combustion, automobiles, field burning, factories and unpaved roads. Also a result of photochemical processes.

SOURCE: Donald Ballanti, 1996.



Table 31

APPLICABLE FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

<u>Pollutant</u>	<u>Averaging Time</u>	<u>Federal Primary Standard</u>	<u>State Standard</u>
Ozone	1-Hour	0.12 PPM	0.09 PPM
Carbon Monoxide	8-Hour	9.0 PPM	9.0 PPM
	1-Hour	35.0 PPM	20.0 PPM
Nitrogen Dioxide	Annual	0.05 PPM	---
	1-Hour	---	0.25 PPM
Sulfur Dioxide	Annual	0.03 PPM	---
	24-Hour	0.14 PPM	0.05 PPM
	1-Hour	---	0.5 PPM
PM-10	Annual	50 ug/m <sup>3</sup>	30 ug/m <sup>3</sup>
	24-Hour	150 ug/m <sup>3</sup>	50 ug/m <sup>3</sup>
Lead	30-Day Average	---	1.5 ug/m <sup>3</sup>
	3-Month Average	1.5 ug/m <sup>3</sup>	---

SOURCE: Donald Ballanti, 1996.

PPM = parts per million

ug/m<sup>3</sup> = micrograms per cubic meter

#### **d. Existing Air Quality**

The project is within the San Francisco Bay Air Basin. The local air quality agency, the Bay Area Air Quality Management District (BAAQMD), operates a network of permanent monitoring sites throughout the Bay Area. The closest monitoring station to the project site is located in Concord.

Table 32 shows a summary of violations of ambient air quality standards recorded at the Concord monitoring site during the five-year period from 1990 to 1994. All federal standards were met at the Concord monitoring site during the period (compliance with the ozone standard is based on a three-year average). Violations of the more stringent state ozone standard were recorded in each year, as were violations of the state standard for PM-10.

#### **e. Attainment Status and Regional Air Quality Plans**

The federal Clean Air Act and the California Clean Air Act of 1988 require that the State Air Resources Board, based on air quality monitoring data, designate portions of the state where the federal or state ambient air quality standards are not met as "nonattainment areas". Because of the differences between the national and state standards, the designation of nonattainment areas is different under the federal and state legislation.

The U.S. Environmental Protection Agency recently redesignated the Bay Area as a "maintenance area" for ozone. The "Urbanized Area" of the air basin is considered "nonattainment" for carbon monoxide; however, a request for redesignation to "maintenance area" has been submitted to the U. S. Environmental Protection Agency. The air basin is an attainment area or is unclassified for all other national ambient air quality standards.

Under the California Clean Air Act, the entire San Francisco Bay Air Basin is a nonattainment area for ozone and PM-10. The air basin is either "attainment" or unclassified for other pollutants.

The California Clean Air Act requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods or if not, provide for adoption of "all feasible measures on an expeditious schedule." The Act also grants air districts explicit statutory authority to adopt indirect source regulations and transportation control measures, including measures to encourage or require the use of ridesharing, flexible work hours or other measures which reduce the number or length of vehicle trips.

The current area-wide plan required by the California Clean Air Act, The Bay Area '94 Clean Air Plan, was adopted in December 1994.<sup>1</sup> The Plan proposes the imposition of controls on

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<sup>1</sup> Bay Area Air Quality Management District, Bay Area '94 Clean Air Plan, 1994.

Table 32

SUMMARY OF AIR QUALITY DATA FOR CONCORD, 1990-1994

<u>Pollutant</u>	<u>Standard</u>	<u>Number of Annual Violations in:</u>				
		<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
Ozone	State 1-Hour	3	4	3	7	4
Ozone	Federal 1-Hour	0	0	0	2	0
Carbon Monoxide	State 1-Hour	0	0	0	0	0
Carbon Monoxide	State/Federal 8-Hour	0	0	0	0	0
PM-10	State 24-Hour	6	13	8	2	4
PM-10	Federal 24-Hour	0	0	0	0	0
Sulfur Dioxide	State 24-Hour	0	0	0	0	0
Nitrogen Dioxide	State 1-Hour	0	0	0	0	0

SOURCE: California Air Resources Board, California Air Quality Data, Annual Summaries, 1991-1994; Bay Area Air Quality Management District, Air Currents, April 1995.



stationary sources (factories, power plants, industrial sources, etc.) and Transportation Control Measures designed to reduce emissions from automobiles. Since the Plan does not provide for a 5 percent annual reduction in emissions, it proposes the adoption of "all feasible measures on an expeditious schedule."

#### **f. Sensitive Receptors**

The Bay Area Air Quality Management District defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include hospitals and medical clinics, as well as schools, playgrounds, child care centers, retirement homes, and convalescent homes. The John Muir Medical Center would be considered a sensitive receptor, as would the adjacent Walnut Creek Hospital. Several medical office buildings and a senior housing development on the south side of La Casa Via would also be classified as sensitive receptors.

## **2. PROJECT IMPACTS**

Air quality impacts associated with the proposed project would result primarily from changes in auto emissions; i.e., related increases in local traffic volumes as a result of Master Plan buildout. Carbon monoxide (CO) is the pollutant of greatest concern on the local scale, while ozone precursors are the greatest concern on the regional scale. Other potential air quality impacts include temporary impacts during construction of new structures and infrastructure associated with the project.

#### **a. Significance Criteria**

Based on Appendix G (Item x) of the CEQA Guidelines, a project would normally have a significant impact on air quality if it would:

*violate any air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations.*

For the purposes of this EIR, a significant impact on local air quality is defined as a predicted violation of the carbon monoxide ambient air quality standards due to project traffic on the local street network. For regional air quality, a significant impact is defined as an increase in emissions of an ozone precursor or PM-10 exceeding the Bay Area Air Quality Management District's recommended thresholds of significance. The District considers increases in emissions of a regional pollutant of 150 pounds per day to represent a significant adverse impact.<sup>1</sup>

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<sup>1</sup>Bay Area Air Quality Management District, Air Quality and Urban Development, 1985.

## **b. Short-Term Construction Impacts**

Master Plan buildout construction activities, such as excavation and grading operations, construction vehicle traffic and wind blowing over exposed earth, can be expected to generate exhaust emissions and fugitive particulate matter emissions that would affect local and regional air quality. Construction dust could affect local air quality at various times during construction of the project. The dry, windy climate of the area during the summer months creates a particularly high potential for dust generation when and if underlying soils are exposed to the atmosphere.

In summary, the temporary air quality effects of project-related construction activities would be increased dustfall and locally elevated levels of PM-10 downwind of construction activity. Construction dust has the potential for creating a nuisance at nearby properties and sensitive receptors. Construction dust is considered to represent a *potentially significant localized and temporary impact (AQ Impact 1)* (see "a. Significance Criteria" above).

In addition, grading associated with the project could produce odors due to disturbance of underground sulphur springs that are known to exist in the project site vicinity. This odor, which would likely be a "rotten egg"-type smell associated with hydrogen sulfide, may represent a temporary nuisance during project construction. The odor would not be expected to pose a health hazard; while high concentrations of hydrogen sulfide such as those used in some industries can be hazardous, these high concentrations are not typically found in natural settings. Nevertheless, the potential for unpleasant sulphur odor during construction is considered a *potentially significant localized and temporary impact (AQ Impact 2)* (see "a. Significance Criteria" above).

## **c. Long-Term Local Air Quality Effects**

(1) Local Carbon Monoxide. On the local scale, the pollutant of greatest interest is *carbon monoxide*. Concentrations of this pollutant are related to the levels of traffic and congestion along streets and at intersections.

The CALINE-4 computer simulation model was applied to the four most congested "study" intersections in the Master Plan vicinity to estimate project impacts on local carbon monoxide levels. The CALINE-4 program and the assumptions made in its use are described in Appendix C.

Table 33 shows the results of the CALINE-4 modelling for existing conditions, year 2010 baseline conditions, and year 2010 with buildout under the proposed Master Plan. The concentrations in Table 33 are to be compared to the state and federal ambient air quality standards listed in Table 31; predicted 1-hour concentrations in Table 33 are to be compared to the state standard of 20 PPM and the federal standard of 35 PPM; predicted 8-hour concentrations in Table 33 are to be compared to the state and federal standard of 9 PPM.

Table 33

PREDICTED WORST-CASE CARBON MONOXIDE CONCENTRATIONS AT SELECTED INTERSECTIONS, IN PARTS PER MILLION

<u>Intersection</u>	<u>Existing</u>		<u>2010 Baseline</u>		<u>2010 Baseline plus Project</u>	
	<u>1-Hour</u>	<u>8-Hour</u>	<u>1-Hour</u>	<u>8-Hour</u>	<u>1-Hour</u>	<u>8-Hour</u>
Ygnacio Valley/Civic	17.8	<b>10.5</b>	8.2	4.4	8.2	4.4
Ygnacio Valley/Walnut Boulevard	15.4	<b>9.6</b>	7.9	4.2	7.9	4.2
Ygnacio Valley/La Casa Via/Kinross	15.5	<b>10.6</b>	7.6	4.0	---	---
Ygnacio Valley/New Access/ Kinross	---	---	---	---	7.7	4.1
Ygnacio Valley/Current Access Road	11.5	6.1	6.3	3.1	6.7	3.4

SOURCE: Donald Ballanti, 1996.

***Bold italics*** indicate concentrations that exceed federal or state standards.



*Existing* concentrations meet the 1-hour ambient standard, but exceed the 8-hour ambient standard near three of the four intersections studied. These are localized violations and do not indicate a generalized carbon monoxide problem near the project site.

*Future year 2010* baseline concentrations without the project would be substantially below current levels due to anticipated reductions in per-mile emission rates from vehicles resulting from current emission control standards for autos and trucks. Projected year 2010 concentrations would meet all state and federal standards.

*Project buildout traffic in the year 2010* would increase carbon monoxide concentrations by up to 0.4 PPM at the intersections studied, but project traffic would not cause exceedance of the state or federal standards. Project impacts on ambient carbon monoxide concentrations are therefore considered to be less-than-significant.

(2) Local TACs. The existing John Muir Medical Center was a minor source of ethylene oxide (EtO) emissions, which are considered a Toxic Air Contaminant, until July of 1993, when the medical center replaced its EtO sterilizing equipment with sterilizers that use hydrogen peroxide. It is considered unlikely that the use of ethylene oxide sterilization would be reinstated.<sup>1</sup> However, any increase in ethylene oxide use or construction of new ethylene oxide sterilizers would be subject to Bay Area Air Quality Management District Regulation 11, Rule 9, which requires that operators of ethylene oxide sterilizers reduce emissions of ethylene oxide by minimum of 99 percent. In addition to the requirements of Regulation 11, Rule 9, the permitting requirements of the District would have to be met prior to installation of an ethylene sterilizer. If the proposed emission, after abatement, exceeds certain thresholds, the District may require preparation of a health risk assessment prior to approval of the permit.

Under these current regulations, ethylene oxides emissions from the proposed facility would not be expected to have a significant impact.

(3) Regional. Project traffic would also have an effect on air quality outside the project vicinity. Trips to and from the project would result in air pollutant emissions over the entire Bay Area. To evaluate emissions associated with the project, the URBEMIS-5 computer program, developed by the California Air Resources Board, was employed.

Table 34 shows the anticipated daily increases in regional emissions from auto travel for reactive organic gases (hydrocarbons) and oxides of nitrogen (two precursors of ozone), sulfur oxides and PM-10 (particulate matter, 10 micron). The URBEMIS-5 model and the conditions assumed in its use are described in Appendix C.

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<sup>1</sup>Telephone conversation with Carol Thompson, Supervisor, Environmental Services, John Muir Medical Center, February 16, 1996.

Table 34  
PROJECT REGIONAL EMISSIONS IN POUNDS PER DAY

<u>Source</u>	<u>Reactive Organic Gases</u>	<u>Nitrogen Oxides</u>	<u>Sulfur Oxides</u>	<u>PM-10</u>
Auto Traffic	61.7	95.8	11.5	17.1
Space/Water Heating	0.7	16.0	neg.	0.1
<b>Total</b>	<b>62.4</b>	<b>111.8</b>	<b>11.5</b>	<b>17.2</b>
BAAQMD Significance Threshold	150.0	150.0	150.0	150.0

SOURCE: Donald Ballanti, 1996.

Emissions from project-related increases in combustion of natural gas for space and water heating have also been calculated and are shown in Table 34.

Guidelines for the evaluation of project impacts issued by the Bay Area Air Quality Management District consider emission increases to be significant if they exceed 150 lbs per day for regional pollutants. Projected project emissions shown in Table 34 would not exceed these criteria any of the four regional pollutants. As a result, the project is considered to not have a significant effect on regional air quality.

#### **d. Cumulative Impacts**

The proposed project would be part of the anticipated pattern of continued growth and intensification in metropolitan portions of the Bay Area. The Bay Area is experiencing continued growth in population and vehicle use that will continue to affect the emission of regional pollutants such as reactive organic gases and nitrogen oxides. Nevertheless, current projections are that regional emissions of these pollutants will decrease in the future, despite the cumulative growth in population and vehicle use, due to regional programs for reducing emissions that are in place or currently being considered. Continued improvement in regional air quality is projected through the year 2000, although attainment of all applicable state and federal air quality standards throughout the entire Bay Area Air Basin is not projected by the year 2000.<sup>1</sup>

### **3. MITIGATIONS**

#### **a. Short-Term Construction Period Impacts**

**(AQ Impact 1)** The severity of construction impacts can be reduced to a level that is less-than-significant through application of mitigation measures. Conditions of approval should include the following requirements for construction activities:

- Whenever possible, use dust-proof chutes for loading construction debris onto trucks.
- Use watering to control dust generation during demolition of structures and break-up of pavement.
- Suspend dust-producing activities during periods of high winds when dust control measures are unable to avoid visible dust plumes.
- During the dry season (May-October), provide equipment and staffing for watering of all exposed or disturbed soil surfaces at least twice daily.
- Water or cover stockpiles of debris, soil, sand or other materials that can be blown by the wind.

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<sup>1</sup>Bay Area Air Quality Management District, Bay Area '94 Clean Air Plan, December 1994.



- Require daily clean-up of mud and dirt carried onto paved streets from the site.
- Cover or wet down any fine materials transported by truck to control dust.
- Limit the speed of all construction vehicles to 15 miles per hour while travelling on unpaved surfaces.
- Water all inactive portions of the site with an appropriate dust suppressant, and cover or seed these areas.

**(AQ Impact 2)** Require the design and construction phases of subsequent Master Plan-related development to plan for the possibility of encountering sulphur spring odor during grading and other construction activities. Require any sulphur spring water encountered during project construction to be pumped out of construction areas and properly disposed. These measures would reduce the odor impact to a less-than-significant level.

**b. Long-Term Local Air Quality Impacts**

No significant adverse project impacts have been identified; no mitigations are required.

**c. Cumulative Impacts**

No significant adverse project impacts have been identified; no mitigations are required.



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## K. VEGETATION AND WILDLIFE

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This section documents and evaluates project site biological resources; describes whether any sensitive species, habitats, or communities might be present; identifies and evaluates any related impact potentials associated with the proposed medical center expansion; and describes warranted mitigation needs. Potential impacts and mitigation needs were assessed under the guidelines of CEQA, the federal Clean Water Act (protection of wetlands), the city of Walnut Creek's tree protection ordinance, and other relevant environmental policies and regulations.

### 1. SETTING

#### a. Methods

The project site and vicinity was surveyed on December 15, 1995, by the EIR biologist. Each of the four project subareas (sites) was surveyed for evidence of natural communities or habitats, native trees, wetlands, and other biological features of significance.

To provide focus for the field surveys, sensitive plants and animals that could potentially occur in this area were determined from data available from the California Natural Diversity Data Base (CNDDB),<sup>1</sup> historic rare plant mapping by the California Native Plant Society (CNPS),<sup>2</sup> the current inventory of rare plants in California by Skinner and Pavlik (ed.s, 1994),<sup>3</sup> and other relevant literature (see Tables 1 and 2, and other lists in Appendix D). The potential for each listed species to occur on or near the project site was assessed on the basis of the extent and quality of the habitats present, plus the character of the surrounding landscape. As indicated in the tables in Appendix D, virtually all sensitive species in the region can be considered unlikely to occur in the project area due to lack of sufficient suitable habitat.

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<sup>1</sup>California Department of Fish and Game, Non-Game Heritage Division, Sacramento, CA, California Natural Diversity Data Base (data reports for the Walnut Creek region, including sensitive plant species reports), 1994; and California Department of Fish and Game, Natural Heritage Division, Sacramento, CA, California Natural Diversity Data Base (list of endangered and threatened animals of California), April 1994.

<sup>2</sup>California Native Plant Society, collection of rare plant maps for California, on file at the California Natural Diversity Data Base, California Department of Fish and Game, Sacramento, CA.

<sup>3</sup>Skinner, M.W. and Pavlik, B.M., Inventory of Rare and Endangered Vascular Plants of California, California Native Plant Society Special Publication No. 1 (fifth edition), 1994.



Potential wetland conditions were determined according to the U.S. Army Corps of Engineers' 1987 wetland delineation guidelines and definitions<sup>1</sup>. Soil and vegetation characteristics were examined throughout the project area, and evidence of past prolonged hydrology and associated wetland plant species was sought.<sup>2</sup>

#### **b. Walnut Creek Tree Preservation Ordinance**

The City of Walnut Creek Tree Preservation Ordinance (Ordinance 1852) requires a Tree Removal Permit for the removal of any tree within the city. The ordinance defines a "tree" as "any live woody plant having a single perennial stem of twenty-eight inches or more in circumference or multistemmed perennial plant having aggregate circumference of forty inches or more measured four and a half feet above grade."<sup>3</sup> A multistemmed plant with single-stem circumference exceeding 28 inches, and a tree of any size within a grove of trees, also meets the Tree Preservation Ordinance definition of a "tree."

In order to obtain a Tree Removal Permit from the city, an application must be filed with the Public Services Director (or designated representative, such as the City Arborist) indicating relevant information about the tree (or trees) proposed for removal, such as species, size, location, health, reason for removal, etc. For any tree removal resulting from site development, the Tree Removal Permit is approved or denied by the city reviewing authority with the highest level of authority over the development itself. In approving a Tree Removal Permit, the reviewing authority may impose conditions to protect other trees which are to be retained.

The city's Tree Preservation Ordinance affords special protections to "Highly Protected Trees," which include species of *oak*, *madrone*, *buckeye*, *black walnut*, and *locust*, as well as rare examples of trees indigenous to the Walnut Creek area. In addition, trees of any species may be classified as Highly Protected if they are deemed by the city to be "exceptional" in terms of size, use, health, location or visual prominence.

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<sup>1</sup>U.S. Army Corps of Engineers, Wetlands Delineation Manual, prepared by Environmental Laboratory, Department of the Army, Waterways Experiment Station, Wetlands Research Program, Tech. Report Y-87-1, Vicksburg, MI, 1987.

<sup>2</sup>Plant species sought, and names used, were based on the following sources:

- (a) Munz, P.A., Supplement to a California Flora, University of California Press, Berkeley, Los Angeles, CA, 1959.
- (b) Munz, P.A., and Deck, D.A., A California Flora, University of California Press, Berkeley, Los Angeles, London, 1968.
- (c) Skinner, M.W., and Pavlik, B.M., op. cit.

<sup>3</sup>Ordinance 1852.

A Tree Removal Permit may only be granted for Highly Protected Trees if the reviewing authority "finds that the burden to the applicant in preserving the Tree greatly outweighs the benefit to the public, and that preserving the Tree would severely reduce the scale or feasibility of the development."<sup>1</sup> In making such a finding, the reviewing body is to consider the affected trees' species, size, health, safety, location, and historical significance, as well as the design and potential public benefit of the proposed development associated with the Tree Removal Permit request. If granted for a Highly Protected Tree, a Tree Removal Permit may contain a condition requiring the applicant to plant new trees "at a value equal to the value of the Highly Protected Tree that will be removed," or that the applicant pay the city an in-lieu fee equal to that amount.<sup>2</sup>

### **c. Project Conditions**

The project site consists of four subareas (two fully developed, two primarily vacant) that are situated within a generally urban setting in the city of Walnut Creek. The entire project area has been used historically for agricultural purposes (grazing, hay, orchard). The adjacent lands are almost completely developed with ancillary medical offices and housing. Only the 230 La Casa Via Site adjoins any significant undeveloped land, bordering a portion of the Shell Ridge open space area to the southeast. The 230 La Casa Site is also the only site that contains any significant native vegetation (oaks).

Figure 41 shows the general locations of existing vegetation on the project site.

(1) Main Campus Site. The Main Campus Site is almost completely developed with pavement, buildings, and introduced landscaping. The overall site is gently sloping to the northeast, but has considerable graded areas that are level, supporting buildings and parking.

There are numerous planted pines and redwoods along the northeastern edge of the site, and there is a small hillock on the northern edge. This small hill has a landscaped cut to the south (facing the hospital), and is relatively natural on top and downslope to the north. The hillock supports six native oak trees on top, with three more downslope to the north, ranging in size from about 8 inches up to about 20 inches in diameter (see Figure 41). These are mostly valley oaks (*Quercus lobata*), although there are two or three small live oak (*Quercus agrifolia*) saplings. The ground beneath the oaks and over the majority of this hill consists of typical non-native annual grassland (*Avena*, *Bromus*, *Lolium*, *Erodium*, *Brassica*, *Convolvulus*), and has been recently disced, apparently for weed control and fire hazard reduction. No other significant native vegetation is present in this area.

Biotic resources of any significance (moderate) on the developed Main Campus Site are limited to the oaks on the small hill. There are no wetlands, creeks, or other significant

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<sup>1</sup>Ordinance 1852.

<sup>2</sup>Ibid.

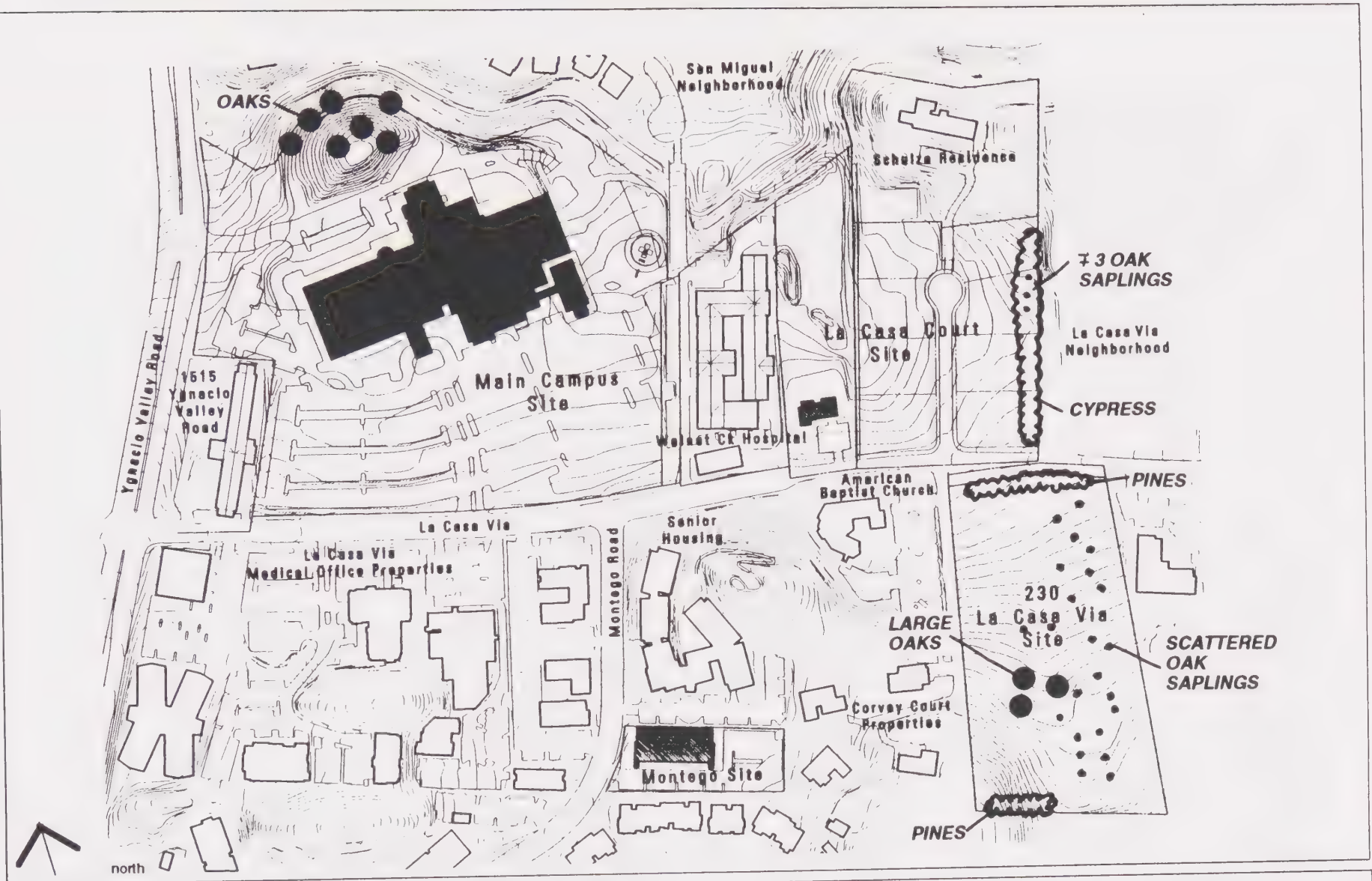


Figure 41  
**PROJECT SITE  
 VEGETATION**

SOURCE: Charles Patterson

**JOHN MUIR MEDICAL CENTER MASTER PLAN EIR**

City of Walnut Creek, CA

Wagstaff and Associates



hydrological features, and none of the site constitutes significant potential habitat for any sensitive plant or animal species. There appears to be essentially no potential for rare plants to occur here and additional botanical surveys are not warranted. The developed site's planted landscaping is of very limited value to a few urban-tolerant wildlife species (songbirds, rodents, etc.) and is not regarded as a significant biotic resource.

(2) La Casa Court Site. The La Casa Court Site consists of approximately seven acres that slope gently down to the northwest and up to the east and northeast. The site has been previously graded and at least partially prepared for development. The western portion of the site contains a building that was originally a single-family home and is now used as a medical office (with typical associated landscaping). A paved cul-de-sac, La Casa Court (with curb, gutter, and storm drain), bisects the site northeast-southwest. A large area just west of the paved roadway is completely graveled (with no vegetation).

There are scattered coyote brush shrubs (*Baccharis pilularis* ssp. *consanguinea*) along the southern and western edges, and a row of planted pampas grass (*Cortaderia*) near the north side of this site. Most of the remaining land is typical non-native annual (field) grassland that has been recently disced, except for a narrow strip along the eastern edge that contains an assemblage of planted ornamental trees (pines, cypress, etc.), plus about three medium-sized (four to six inches in diameter) valley oaks (see Figure 41). The field supports common weedy species (annual grasses, herbs, and weeds). Observed native plants were limited to the coyote brush shrubs and three oaks along the eastern edge, and a few scattered California poppies (*Eschscholzia californica*).

This site appears to contain no wetlands, creeks, or other significant hydrological features, and none of the trees on the eastern edge meets the minimum size criteria for the city of Walnut Creek's tree removal permit ordinance. There are no habitats that are suitable for supporting any sensitive species (plants or animals), and only common wildlife appear to use the site. The planted trees along the eastern edge may provide some potential nesting habitat for common birds and resting areas for small mammals, but because of the limited size, narrow configuration, non-native character, and immediate proximity to residences, this area does not constitute significant habitat for wildlife. The remainder of the site provides minor potential foraging habitat for small mammals, songbirds, and other urban-tolerant wildlife, but because of the annual discing and generally urban setting, does not represent significant habitat for wildlife.

(3) 230 La Casa Via Site. This 6.3-acre site slopes gently downward from its southern border, which is shared with the Shell Ridge open space area, down to La Casa Via at the northern edge. The property was once occupied by a single-family house plus a surrounding walnut orchard. The site currently contains typical (disced) non-native annual grassland dotted with a sparse distribution of remnant (orchard) English walnut trees, plus three large native valley oaks and about 15 sapling oaks (less than 10 inches diameter and/or less than 20 feet tall) scattered about the central part of the site (see Figure 41). There are also several dozen old walnut trees (most of which are relatively small and multi-trunked), plus scattered

coyote brush, toyon (*Heteromeles arbutifolia*), and oleander shrubs. In addition, rows of planted pines are located along the La Casa Via frontage and along the eastern edge next to other existing residences, and a few Monterey pines are located on the hill in the southwestern corner of the site (see Figure 41). There is a small stand of creeping wildrye (*Elymus triticoides*, a native perennial grass) on the north-facing slope at the site's southern boundary.

This parcel slopes gently and continuously downward to the north, and contains no creeks, swales, ditches, or any other apparent wetlands. Drainage occurs via broad sheet flow, and the soil appears to be relatively well drained, with no significant micro-depressions or low places. Based on the disturbed character of the site (disced, old orchard and homesite, adjacent and onsite human activities) and its lack of suitable habitats, the potential for any sensitive plants to occur here is very low. There are no unusual soils or rocks, no wetlands, and no undisturbed ground. No rare or unusual plants were observed. Given these characteristics, plus the annual discing, there is no evident need for any additional botanical surveys.

The site contains little native vegetation (oaks, shrubs) and provides minor foraging or nesting habitat for wildlife. Because of the lack of dense woody vegetation and the regular discing, the site does not currently represent good habitat for resident wildlife such as deer, medium-sized mammals (e.g., skunk, raccoon, fox, badger, etc.), owls and other raptors. The property is suitable for some rodents, songbirds, and common lizards and snakes, but does not constitute suitable habitat for any sensitive species. Repeated discing and local pet populations appear to preclude any significant burrowing species. Common hawks, owls, and other wide-ranging raptors probably forage through the open grasslands on occasion, but because of the surrounding urban environment, do not reside permanently onsite.

There are no apparent wetland or other aquatic habitats for sensitive wildlife species (e.g., California tiger salamander, red-legged frog), and the limited tree and urban setting preclude nesting by any sensitive birds.

(4) Schulze Property. The Schulze Site consists of a small hilltop at the north end of the La Casa Court Site, with access via La Casa Court. The site contains an existing single-family house plus associated gardens, work and play areas, and extensive planted landscaping. There are numerous ornamental trees around the homesite, including pines, acacia, eucalyptus, a cypress, and oleander shrubs.

This site appears to contain no significant natural habitats or vegetation, nor any creeks, drainages, or other potential wetlands. The trees on this site provide minor potential nesting habitat for urban-tolerant wildlife species but, because of the setting, ongoing human uses, and non-native character, do not appear to offer any significant potential for most native wildlife species. This site is used by small mammals, songbirds, common lizards and snakes, and possibly for resting and/or foraging on occasion by owls, but does not appear to have any significant habitat value for native wildlife.

## 2. IMPACTS

### a. Significance Criteria

Based on the CEQA Guidelines,<sup>1</sup> project impacts on vegetation and wildlife would be considered to be significant if they would:

1. Cause a fish or wildlife population to drop below self-sustaining levels;
2. Threaten to eliminate a plant or animal community;
3. Substantially affect, reduce the number, or restrict the range of unique, rare, or endangered species of animal or plant, or the habitat of the species;
4. Substantially diminish or reduce habitat for fish, wildlife, or plants; or
5. Interfere substantially with the movement of any resident or migratory fish or wildlife species.

These criteria are used to evaluate the potential impacts of the proposed Master Plan on vegetation and wildlife.

### b. Main Campus Site

Potentials for adverse impacts on biotic resources at the Main Campus Site are limited to the small hillock on the northern side of the property where six native oak trees could be affected by future project grading and construction. The loss of these oaks would not be considered a significant biotic impact, given the generally developed and landscaped character of the Main Campus Site, and the fact that these trees do not constitute a significant *biotic community* (see criteria 2, 3, and 4 in section 2.a above). However, those oak trees over about nine inches in diameter (28 inches in circumference) would classify as Highly Protected Trees, and, as discussed in more detail in section 1.b above, could only be removed if a Tree Removal Permit were granted by the City Council with special findings and conditions (including tree replacement or payment of an in-lieu fee). No wetlands or sensitive species (or their habitats) would be affected here.

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<sup>1</sup>State Office of Planning and Research, CEQA Guidelines, Section 15065(a) and Appendix G, Items c, d, and t, 1995.



**c. La Casa Court Site**

(1) Tree Impacts. Project impacts at this site could include the removal of the planted cypress along the eastern edge, if future development and/or clearing extends all the way to the fence separating the site from the adjacent residential area. Many of these trees meet the city's minimum standards for requiring Tree Removal Permits; however, their removal would not be regarded as biologically significant based on the CEQA criteria listed in section 2.a above. Although a small increment of general wooded cover could be lost, this does not represent a significant adverse impact since the trees are non-native and occur in the immediate proximity of intensive residential development.

The potential project-related loss of three small oaks (approximately five to ten inches in diameter), also located on the site's eastern edge, would not represent a significant biotic impact based on CEQA criteria, although a Tree Removal Permit would be required for removal of any oak tree here with a trunk of nine inches or more in diameter. As Highly Protected Trees, the granting of a Tree Removal Permit would be contingent upon special findings and conditions by the City Council. Given the location of these trees within a Master Plan-required buffer area, it is possible that no removal of these oaks would be necessary, even as the Master Plan approaches buildout.

(2) Other Impacts. A minor amount of open annual grassland would be lost, but this loss would not be sufficient to constitute a significant impact. Wildlife impacts would also be negligible due to the lack of any significant habitat resources. No apparent wetlands, unusual soils, or natural communities would be affected, and aside from the few oaks that could be lost, no significant impact to biotic resources would occur. If the small oaks are removed, there would be no significant loss of native woodland community values, nor would any specific mitigation be mandated.

**d. 230 La Casa Via Site**

(1) Tree Impacts. Development on this site could involve removal of the three very large, mature oaks in the center of the site (which classify as Highly Protected Trees in the city's Tree Preservation Ordinance), plus numerous scattered oak saplings (most of which are less than 28 inches in circumference and would therefore not meet the definition of a "tree" in the city's Tree Preservation Ordinance). Taken alone, neither the old nor young trees here constitute highly significant resources. However, their removal would represent a moderate cumulative loss of individual native trees (and the three large oaks would require tree removal permits), although no actual oak woodland or related communities would be lost. The three mature oaks are quite large (in excess of 36 inches in diameter at breast height (dbh), but are also fairly old, exhibit significant decaying and breaking branches, show poor vigor, and are generally in poor health. While their removal would require a Tree Removal Permit, they are nearing the end of their natural life spans and no longer represent productive resource features. Still, because of their size, age, and location adjacent to the Shell Ridge open space area, and the associated value of existing native tree cover for wildlife, removal of

these three trees would represent a *potentially significant cumulative impact (VW Impact 1)* (see Criterion 4 under "a. Significance Criteria" above).

Under current or projected land uses (without additional development), it is not likely that this site could recover to become a full woodland community.

No other natural plant communities, nor any significant native vegetation (aside from the oaks), would be lost. The planted pines, walnuts, and other ornamentals do not represent significant natural resources and their removal would not constitute a significant adverse impact based on the CEQA criteria included in section 2.a above. However, because many of these ornamental trees are over 28 inches in circumference, they would require the issuance of a Tree Removal Permit by the city prior to removal.

(2) Other Impacts. A minor amount of general open foraging habitat for common wildlife species would also be lost with development of the 230 La Casa Via Site. This loss represents a *potentially significant impact* due to the site's location adjacent to the Shell Ridge open space area (*VW Impact 2*) (see Criterion 4 under "a. Significance Criteria" above).

No sensitive wildlife species (or habitat for such species) would be directly affected, and no habitat considered to be high quality would be lost. Only common wildlife species would be affected, and no species would suffer any impacts deemed to be significant to their populations or species as a whole. Because of the general lack of existing dense cover, resident wildlife (small mammals, rodents, songbirds) is minimal and no significant impacts to such species would occur.

No apparent wetlands, unusual soils, or other notable resource features would be affected (aside from the oak trees), and no other significant habitat elements would be lost.

#### e. Schulze Property

The Schulze property contains no significant remaining natural resource values, and no significant impact to native biotic resources would be expected to occur from either the currently proposed adjacent medical center project or any possible future development of the site itself. Future removal of any or all of the planted trees could result in a minor reduction in habitat for urban-tolerant wildlife, but this is not considered to represent a significant impact.

The Schulze residence is not currently proposed in the Master Plan for any substantial changes or development. Although future development, if and when proposed, may include appreciable tree removal, this would mostly involve non-native species, and would not constitute a significant biotic impact. Most of the planted trees are large enough to require tree removal permits, but the impact to natural resources would be minimal. Future development may dictate some tree replacement, but the impact to biotic values would not require any specific habitat mitigation.

### 3. MITIGATIONS

In general, none of the three Master Plan subareas contain any biological resources of high significance, and mitigations that would be required are minimal. With respect to potential tree removal, it appears that because of the peripheral locations of many trees (such as the planted pines and cypress on the 230 La Casa Via and La Casa Court Sites), plus the possible need for property boundary setbacks, removal of many existing onsite trees may not be necessary. Prior to the development of each site, however, it is recommended that the applicant prepare a specific *tree removal plan* to document which trees would be removed. This plan would help to determine which trees are subject to the requirements of the city's tree removal ordinance.

Typically, replacement plantings of the same species at one-to-one in general landscaping areas (above and beyond the normal landscaping) are deemed adequate mitigation when a Tree Removal Permit is granted. However, removal of Highly Protected Trees (such as the three large oaks on 230 La Casa Via) may require the planting of larger (e.g., 20-gallon stock) specimen trees, or the payment of an in-lieu fee. The City Council would make a decision regarding the preferred mitigation choice (replacement or in-lieu fee) after the application for a Tree Removal Permit is filed, based on the recommendation of the city's arborist.

More specific mitigation requirements and suggestions for the potentially significant biotic habitat impacts identified in this EIR are identified below.

#### **a. Main Campus Site**

While no significant biotic impact has been identified and no specific mitigation is required, it is recommended that the oak trees on the northern knoll within the Main Campus Site be preserved. If the mitigation measures recommended in section IV.B.3 of this EIR for *V Impact 3* are implemented, this knoll would be preserved and these oaks would not be affected by the project. However, should future development or additional landscaping activities be allowed to encroach into this area, a Tree Removal Permit would be required for the removal of any tree in excess of nine inches dbh, and because these are Highly Protected Trees, replacement tree planting or payment of an in-lieu fee would be required. Given the visual importance of these northern knoll trees, tree replacement rather than an in-lieu fee shall be implemented to compensate for any tree loss. (Some of the oaks here may be less than nine inches dbh and would thus not be subject to Tree Removal Permit requirements.)

#### **b. La Casa Court Site**

While no significant biotic impact has been identified and no mitigation is required, the zone of planted trees, especially the few oaks, along the eastern edge of the site should be retained if possible. Alternatively, replacement trees should be planted in a protected area.



Tree removal permits would be required for any tree over nine inches dbh that would be removed, and replacement planting may be required for any oaks taken out.

**c. 230 La Casa Via Site**

(1) Tree Impacts. (***VW Impact 1***) To mitigate the potentially significant impact of Master Plan related tree removal on this site, any and all oaks should be retained if possible, or their removal should be mitigated through native oak planting either onsite or in dedicated land nearby. Because of the poor health and isolated setting of the two largest oaks, their removal would not result in major habitat loss, and extensive mitigation for actual biological or habitat values would not be warranted. However, because of the very large size and great age of the three mature trees, their removal (if allowed pursuant to the granting of a Tree Removal Permit) will be conditioned upon specific mitigation measures which, based on the city's Tree Preservation Ordinance, would most likely consist of either replacement planting with trees of equivalent value, or payment of an in-lieu fee of equal value. From a biotic standpoint, mitigation should require a replacement effort of at least one-to-one with 20-gallon (or larger) container stock of the same species: valley oak. The replacement trees should be physically protected (caged), supplementally irrigated during at least the first summer, and remain alive and healthy (or be replaced) at the end of five years of general monitoring and maintenance. Alternatively, for each tree removed, a larger number of acorns or one-year old seedlings could be planted and protected until a minimum of about nine (a three-to-one replacement ratio) are well established and reach five to six feet in height.

In addition, removal of the site's smaller oaks (i.e., those over about four inches dbh) should be accompanied by one-to-one replacement with one- to five-gallon stock.

Once the applicant has applied for Tree Removal Permits and the city's arborist has inspected the site, the city will determine if Tree Removal Permits can be approved for any or all of the three large oaks, and, if granted, the replacement or in-lieu fee requirements will be determined at that time.

Implementation of these measures would reduce this impact to a less-than-significant level.

Tree Removal Permits would also be required for many of the 230 La Casa Via Site's other trees, including all over nine inches dbh, and all multi-trunked trees with an aggregate circumference of 28 inches or greater. Many of the existing old walnut trees meet this minimum criterion, but as introduced trees without significant habitat value, may not necessarily require replacement (mitigation) planting.

A *detailed arborist report* should be completed prior to the construction phase in order to determine exactly how many trees would be removed. If possible, the three large oaks should be retained within the site design, protecting each to the outer extent of the drip line by maintaining existing grades and avoiding irrigation within these zones. Replacement planting would probably be required if any of these three are removed. The city arborist's report

should evaluate the health of these three trees to determine if they can be saved and kept as viable specimens.

(2) Other Impacts. (**VW Impact 2**) With regard to wildlife, mitigate the small incremental loss of onsite open grassland habitat (and possibly some oaks) due to Master Plan buildout through onsite or adjacent habitat enhancement. This mitigation would be appropriate and desirable from the perspective of agencies such as the State Department of Fish and Game that may review future development plans for the site.

A measure that would help reduce the development's indirect effects on nearby open space habitats would be to complete a revegetation or general tree planting effort along the site's southern edge. This would buffer the development site from the Shell Ridge open space area and add at least some new native vegetation to the edge of the undeveloped area. It is recommended that a strip of at least 25 feet along the southern site boundary be planted with native oaks (valley oak and coast live oak), buckeye (*Aesculus*), California bay (*Umbellularia*), and/or other native tree species (e.g., Douglas-fir, madrone, walnut) to create a wooded buffer and physical screening between the two land uses. This measure would reduce the impact to an insignificant level.

No other mitigation is required with regard to sensitive species, natural habitats or communities. However, general mitigations that would serve to reduce areawide impacts that have already occurred include landscaping with native plants, strict erosion control during and after construction, and prohibiting or severely restricting the use of potentially invasive introduced ornamentals such as pampas grass, acacia, non-native pines, and eucalyptus.

#### **d. Schulze Property**

No significant impacts have been identified; no mitigation is required.

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## L. CULTURAL RESOURCES

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This section describes the potential existence of prehistoric and historic resources on the project site, possible project impacts on these resources, and related mitigation needs. The findings in this chapter are based on archival research at the Northwest Information Center Historical Resources Information System at Sonoma State University, and previously conducted field inspections of portions of the project site.

### 1. SETTING

#### a. Background

The first known inhabitants in the Walnut Creek area were members of the Bay Miwok peoples. Walnut Creek encompasses portions of three Native American small nation territories, or "tribelets": the Volvon, Chupcan, and Saclan. Evidence of Native American habitation has been found along local creeks and in nearby areas that are presently open space. At least 55 archaeological studies have been conducted, and 13 cultural resource sites have been identified within the Walnut Creek planning area. The locations of these archaeological sites are recorded by the California Archaeological Inventory, but are kept confidential to prevent site disturbance. California Government Code Section 6254.10 exempts archaeological site information from the California Public Records Act, which requires that public records be open to public inspection.<sup>1</sup>

At least within the historical period, the Saclan occupied the interior valleys in Contra Costa County (Levy, 1978). Most ethnographers consider these Native Americans to be part of the linguistically related Miwok group. They maintained seasonal villages with locations best suiting their food and shelter needs. In the fall, the villagers harvested the acorns found throughout the oak-covered hills, and in the spring and summer they hunted and gathered other plant resources, as well as animals and fish.<sup>2</sup>

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<sup>1</sup>City of Walnut Creek, 1989 General Plan, Community Resources Element, *Conservation and Open Space Subelement*, page 5-27; and Brady and Associates, Final Environmental Impact Report Addendum, Walnut Creek General Plan Amendment, April 1993, page 145.

<sup>2</sup>Larry Seeman Associates, Inc., Final Environmental Impact Report, John Muir Memorial Hospital Phase III Expansion, prepared for the city of Walnut Creek, February 1986, page 131. References are to Levy, Richard, Eastern Miwok in the Handbook of North American Indians, Vol. 8, Robert F. Heizer, editor, Smithsonian Institute, Washington, DC, 1978, pages 398-413.



## **b. Archival Research**

As background for this analysis, a review of documentation on the project area was conducted at the Northwest Information Center Historical Resources Information System at Sonoma State University. Maps, records, and historic site inventories of the area were checked to determine if the project site contains any recorded historic or prehistoric sites.

The review indicated that archaeological site(s) CA-CCo-15 has been recorded in the immediate vicinity of the project area. In 1955, M. Baumhoff recorded CA-CCo-15 as an occupation and burial site. Approximately four burials were located at this nearby site, and one burial contained ten large bird bone whistles, Olivella beads, crystals, and quartz (Baumhoff, 1955). Based on a review of Baumhoff's verbal description and the sketch map for the site's location, it has been determined that the site lies immediately north and east of the Main Campus Site.<sup>1</sup>

## **c. Previous Field Inspection**

A field reconnaissance and shallow shovel test were conducted on portions of the Main Campus Site in 1985 as part of the environmental review for the John Muir Memorial Hospital Phase III expansion. The survey covered an area of approximately 200 feet by 400 feet within the Phase III footprint. No prehistoric remains or evidence of an early occupation were found within this area.<sup>2</sup>

# **2. IMPACTS**

## **a. Significance Criteria**

Based on the CEQA Guidelines, the project would be considered to have a *significant impact* on cultural resources if it would:

1. Eliminate important examples of the major periods of California history or prehistory (CEQA Guidelines, Section 15065(a));
2. Disrupt or adversely affect a prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group; or a paleontological site except as part of a scientific study (CEQA Guidelines, Appendix G, Item j);

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<sup>1</sup>Ibid. References are to Baumhoff, Martin A., Archaeological Site Records for Site CA-CCo-15, 1955, on file at the Northwest Information Center Historical Resources Information System, Sonoma State University.

<sup>2</sup>Ibid.

3. Have the potential to cause a physical change that would affect unique ethnic cultural values (CEQA Guidelines, Appendix I, Item XIV(c)); or
4. Have the potential to cause damage to an important archaeological resource; one that:
  - A. Is associated with an event or person of:
    1. recognized significance in California or American history, or
    2. recognized scientific importance in prehistory.
  - B. Can provide information that is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable or archaeological research questions;
  - C. Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind;
  - D. Is at least 100 years old and possesses substantial stratigraphic integrity; or
  - E. Involves important research questions that historical research has shown can be answered only with archaeological methods.

(CEQA Guidelines, Appendix K, Item III)

#### **b. Project Impacts**

The majority of the project site, including portions of the Main Campus Site, La Casa Court Site, and 230 La Casa Via Site, have previously been disturbed for site preparation and building construction, and no evidence of archaeologic resources has been recorded. However, given the close proximity of the project site to CA-CCo-15, and the fact that in this area of Contra Costa County, two or three prehistoric village sites are often found clustered near each other,<sup>1</sup> it is possible that grading and excavation for Master Plan building construction may encounter as-yet unrecorded archaeologic resources. The possibility of such disturbance of previously undiscovered archaeologic resources represents a *potentially significant adverse impact* of the Master Plan (**CR Impact 1**) (see Criteria 1-4 under "a. Significance Criteria" above).

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<sup>1</sup>County of Contra Costa, Draft Environmental Impact Report, Perma-Bilt General Plan Amendment, County File #4-86-CO, July 1987, page 82.

### 3. MITIGATION

**(CR Impact 1)** As a condition of approval for subsequent development in accordance with the proposed Master Plan, require the applicant to retain a qualified archaeologist familiar with prehistoric archaeology in Contra Costa County to observe approved ground-disturbing activities and project site preparation (grading) activities, in order to inspect the exposed ground surface and subsurface for any additional indicators of the aboriginal presence described in the "Setting" subsection above. Inspect the exposed ground surface and subsurface immediately following initial disturbance of the uppermost two feet of soil on any part of the project site. In the event that any indicators of aboriginal presence are discovered, work in the area defined by the archaeologist as containing potential cultural resources shall be halted and any further alteration of the materials in their context shall be avoided until:

- (a) Mechanical testing is undertaken to determine the surface boundaries, volume, and depth below surface of any cultural deposit; and
- (b) In the event that an actual deposit of cultural materials will be damaged or displaced by further site preparation, a program of in-field evaluation of the scientific importance of the resource is undertaken in accordance with Appendix K of the CEQA Guidelines. If this evaluation demonstrates that the cultural deposit is scientifically "unique" as defined under the CEQA Guidelines, further recommendations for mitigation of impacts to the cultural resource shall be included in the archaeologist's report of findings. Mitigation measures prescribed by the consulting archaeologist and approved by the city of Walnut Creek shall then be undertaken prior to resumption of construction activities.

In such cases, mitigation measures may include, but not be limited to: (1) project redesign, (2) capping of the site followed by construction on fill material, (3) scientifically controlled data retrieval in the area of potential impact, and/or (4) a program of archaeological monitoring of the remaining site preparation activities to record and/or remove any other significant cultural materials.

Any identified resources shall be reported to the Northwest Information Center Historical Resources Information System at Sonoma State University. Identification and removal of any human remains shall be conducted in coordination with the County Coroner and, in the event that any such remains are considered to be Native American in origin by the monitoring archaeologist, in consultation with a designated Most Likely Descendant.

Implementation of this mitigation procedure would be expected to reduce potential project impacts on cultural resources to an insignificant level.



## **V. PROJECT CONSISTENCY WITH ADOPTED PLANS AND POLICIES**



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## V. PROJECT CONSISTENCY WITH ADOPTED PLANS AND POLICIES

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The majority of the project site is located within the city of Walnut Creek and is subject to the policies of the City of Walnut Creek 1989 General Plan. The exception is the 230 La Casa Via Site, which is currently unincorporated and is subject to the policies of the Contra Costa County General Plan (1991).

Section 15125(b) of the CEQA Guidelines require EIRs to "...discuss any inconsistencies between the proposed project and applicable general and regional plans." The Guidelines indicate that the objective of the discussion is to indicate ways to modify the project to reduce any identified inconsistencies with relevant plans and policies. This EIR chapter evaluates potential project inconsistencies with pertinent goals and policies of the City of Walnut Creek 1989 General Plan; the city's Specific Plan No. 1, Specific Plan No. 3, and Specific Plan No. 6; the city's height limitations imposed by the voter-approved Measure A; the Contra Costa County General Plan; and adopted regional plans, including the Contra Costa County Congestion Management Plan, the Action Plan for Routes of Regional Significance, the Association of Bay Area Government's Proposed Land Use Policy Framework, and the Bay Area Air Quality Management District's 1994 Clean Air Plan.

This chapter also evaluates project consistency with the Contra Costa County Local Agency Formation Commission's criteria for annexation, which would apply to annexation of the 230 La Casa Via Site to the city of Walnut Creek.

### A. CITY OF WALNUT CREEK GENERAL PLAN

The City of Walnut Creek 1989 General Plan consists of the following elements:

- *Community Development Element* (revised by General Plan Amendment 6-92 adopted by the City Council on July 27, 1993), which includes the *Residential Development*, *Commercial Development*, *City Design*, *Regional Planning*, and *Growth Limitation Subelements* and the General Plan Land Use Map;
- *Housing Element* (adopted by the City Council on July 19, 1994);
- *Transportation Element* (revised by General Plan Amendment 6-92 adopted by the City Council on July 27, 1993), which includes the *Roadways*, *Transportation Demand Management*, *Bikeways*, *Pedestrian Facilities*, and *Parking and Loading Subelements*;
- *Community Resources Element*, which includes the *Cultural Resources*, *Child Day Care*, *Conservation and Open Space*, and *Parks and Recreation Subelements*; and



- *Public Safety Element*, which includes the *Safety and Community Noise Subelements*.

Many aspects of the proposed Master Plan are wholly consistent with the goals, objectives, and policies of the Walnut Creek General Plan. In keeping with the CEQA Guidelines, the following discussion is limited to an identification of possible project inconsistencies with relevant policies of the General Plan subelements.

## **1. Community Development Element**

a. Residential Development Subelement Policies. The project has the potential to be inconsistent with the following policies and related programs:

*Policy 1: Protect and preserve existing single-family neighborhoods, including those within close proximity to the Core Area.*

*Program 1.1: Enforce the land use densities as shown on the General Plan maps...*

*Policy 7: Prohibit land use changes in residential areas unless findings can be made that the character and integrity of the established residential neighborhood is preserved.*

*Program 7.1: Develop specific findings for allowing land use changes in residential areas which assures the integrity of established residential neighborhoods.*

As noted in section III (Project Description) of this EIR, the project proposes a General Plan Amendment (GPA) to amend the General Plan Land Use Map to (1) redesignate a portion of the La Casa Court Site from *Single-Family Low* (SFL) to *Hospital* (HO), and (2) redesignate the 230 La Casa Via Site from *Single-Family Very Low* (SFVL) to HO. These revisions would represent changes in the land use densities cited in Program 1.1, as well as "land use changes in residential areas" as cited in Policy 7. The city of Walnut Creek has not yet developed the specific findings cited in Program 7.1. Sections IV.A (Land Use) and IV.B (Visual and Urban Design Factors) of this EIR evaluate the project impacts on adjacent, established single-family residential neighborhoods, and identify mitigation measures to protect the integrity of these adjacent neighborhoods by minimizing associated land use compatibility, visual, and other potential adverse urban design impacts.

b. Commercial Development Subelement Policies. The project would not present any inconsistencies with these policies.

c. City Design Subelement Policies. The project would not present any inconsistencies with these policies.

d. Regional Planning Subelement Policies. The project would not present any inconsistencies with these policies.

e. Growth Limitation Subelement Policies. Policy 11 of the General Plan establishes that Community Facilities, including hospitals, are exempt from "the traffic weighted point system and the commercial or residential development caps." However, the project would still have to comply with General Plan Policy 11-related Programs 11.1 through 11.3, which: (1) require Use Permit approval for Community Facilities; (2) require mitigation of project-related transportation impacts "to the extent feasible" (even though Community Facilities are not subject to the traffic-weighted point system); and (3) require the preparation of an annual report to the City Council on the amount and rate of development of Community Facilities projects, including any square footage approved for the hospital pursuant to the Master Plan, so that the Council may consider reducing related development "caps" if there is too much citywide commercial development or if development is occurring too rapidly. Compliance with these requirements would ensure project consistency with General Plan Policy 11 and the related Programs 11.1 through 11.3.

f. Land Use Map Designations. The project has the potential to conflict with the following designations established by the General Plan Land Use Map:

- *The Single Family Low (SFL) designation on the southeastern portion of the La Casa Court Site.* The project, which proposes medical center-related uses on the La Casa Court Site, would conflict with this land use designation. The project proposes a General Plan Amendment to redesignate this site to *Hospital (HO)*, which, if approved, would eliminate the potential conflict.
- *The Single Family Very Low (SFVL) designation on the 230 La Casa Via Site.* The project also proposes medical center-related uses on this site, conflicting with the SFVL designation. The project proposes a General Plan Amendment to redesignate this site to HO, which, if approved, would eliminate the potential conflict.
- *The maximum Floor Area Ratio (FAR) for the Main Campus Site.* The HO land use designation establishes a maximum Floor Area Ratio (FAR) of 0.6 for sites located outside the city's Core Area (i.e., downtown). The Master Plan proposes development on the Main Campus Site at a maximum FAR of 1.15, which would exceed the maximum FAR of 0.6 established by the HO designation. The project proposes a General Plan Amendment to increase the maximum FAR to 1.15 for the Main Campus Site, which, if approved, would eliminate the potential conflict.

Sections IV.A (Land Use) and IV.B (Visual and Urban Design Factors) of this EIR include an evaluation of the potential adverse land use compatibility, visual, and urban design effects of these proposed General Plan Land Use Map changes, and measures to reduce these environmental impacts to less than significant levels.

## **2. Housing Element**

The project would not present any inconsistencies with city *Housing Element* policies.

### **3. Transportation Element**

a. Roadways Subelement Policies. The project would not present any inconsistencies with these policies. The project is not required to comply with the roadway level of service standards noted in Policy 1 of this subelement, since Policy 11 of the Growth Limitation Subelement exempts hospitals from roadway level of service standards.

b. Transportation Demand Management Subelement Policies. The project would not present any inconsistencies with these policies. Mitigation measures regarding Transportation Demand Management (TDM) and local transit access identified in section IV.C.3 (Transportation and Parking) of this EIR would assist in implementing Program 2.1 ("Consider the provision of transit amenities in all new developments, and where appropriate, require the improvements as a condition of project approval") and Policy 5 ("Continue to implement a citywide Transportation Demand Management Program requiring employers to reduce peak period vehicle trips by instituting TDM measures at the employment site").

c. Bikeways Subelement Policies. The project would not present any inconsistencies with these policies.

d. Pedestrian Facilities Subelement Policies. The project has the potential to be inconsistent with the following policy:

*Policy 2: Consider frontage improvements designed to rural standards for new development in existing residential neighborhoods which have a rural character. (Refer to Figure 4-8.)*

Figure 4-8 of the *Pedestrian Facilities Subelement* includes the 230 La Casa Via Site in a "rural character neighborhood" for which rural-standard frontage improvements should be considered. However, as discussed above under "1. Community Development Element, f. Land Use Map Designations," the project proposes to redesignate the 230 La Casa Via Site from *Single-Family Very Low* (SFVL) to *Hospital* (HO). If the city approves this General Plan Land Use Map Amendment, the city should also amend Figure 4-8 of the *Pedestrian Facilities Subelement* to remove 230 La Casa Via from the area classified as a "rural character (residential) neighborhood," since rural-standard frontage improvements may not be appropriate for the site once it is designated for *Hospital* use.

e. Parking and Loading Subelement Policies. The project would not present any inconsistencies with these policies.

### **4. Community Resources Element**

a. Cultural Resources Subelement Policies. The project would not present any inconsistencies with these policies.



b. Child Day Care Subelement Policies. The project would not present any inconsistencies with these policies.

c. Conservation and Open Space Subelement Policies. The project has the potential to be inconsistent with the following policy:

*Policy 4: Maintain in their natural state, to the greatest degree possible, all significant natural features within the Walnut Creek Planning Area including...heritage trees,...and natural habitat areas.*

As described in section IV.K (Vegetation and Wildlife) of this EIR, development in accordance with the Master Plan could involve removal of three very large, mature oaks, plus scattered oak saplings, on the 230 La Casa Via Site. These potentially significant cumulative impacts could be mitigated by (1) retaining the oaks or planting replacement trees on the site or nearby, and (2) a revegetation or general tree planting effort along the site's southern edge, as described in section IV.K. Because these oaks are classified as Highly Protected Trees, these mitigations could be imposed by the city as a condition of approval for any Tree Removal Permit which may be required.

The project also has the potential to be inconsistent with the following policy:

*Policy 8: Preserve archaeological resources under the direction of a qualified archaeologist.*

The site has the potential to contain archaeological resources, as discussed in section IV.L (Cultural Resources) of this EIR. Mitigations recommended in section IV.L.3 would enable the project to comply with this policy, and would also implement related Program 8.2 ("Continue to require developers to halt all work in cultural resources are encountered during a project, and retain a qualified archaeologist to evaluate and make recommendations on the project").

d. Parks and Recreation Subelement Policies. The project would not present any inconsistencies with these policies. As discussed in section IV.E.5 (Public Services) of this EIR, the project proposes to relocate a portion of the East Bay Regional Park District's Briones/Mt. Diablo Trail that extends through the project site. Mitigation measures recommended in section IV.E.5.c (Public Services) would serve to implement Program 5.1 ("Require developers to provide easements through a project for trail access to open space or park facilities") and Program 5.3 ("Continue to implement the trail standards and action program in cooperation with the East Bay Regional Park District and the East Bay Area Trails Council").

## **5. Public Safety Element**

a. Safety Subelement Policies. The project has the potential to be inconsistent with the following policies:

*Policy 5: Minimize the risks to public health and safety due to storage and transportation of hazardous materials.*

*Policy 6: Provide measures to protect the public health from the hazards associated with the transportation, storage, treatment and disposal of hazardous wastes.*

*Policy 9: Ensure that new development which will produce and/or store hazardous materials or hazardous waste is designed to minimize the risk to public safety.*

As discussed in section IV.G (Health and Safety) of this EIR, expansion of the medical center in accordance with the Master Plan could lead to increases in the amount of hazardous materials and wastes handled, stored, and transported to and from the site. Continued compliance by the medical center with existing federal, state, and local regulations regarding hazardous substances is expected to mitigate any potentially significant impacts associated with these increases.

b. Community Noise Subelement Policies. The project has the potential to be inconsistent with the following policies:

*Policy 1: Maintain a standard of Ldn 60 dB (day/night average noise level) for outdoor noise and Ldn 45 dB for indoor noise for all new residential development.*

*Policy 2: Protect the noise environment in existing residential areas.*

*Policy 3: Strive to reduce traffic noise levels in existing residential areas.*

As discussed in section IV.F (Noise) of this EIR, vehicle traffic, mechanical equipment, and helicopter operations associated with the project have the potential to increase noise in residential areas that border the project site to the north (the San Miguel Neighborhood) and to the east (the La Casa Via Neighborhood). Section IV.F.3 recommends measures to mitigate these noise impacts, enabling the project to comply with the above policies. (See further discussion of *Community Noise Subelement* policies and programs in section IV.F.)

## **B. CITY OF WALNUT CREEK SPECIFIC PLANS**

The La Casa Court and 230 La Casa Via portions of the project site are subject to the provisions of city of Walnut Creek's Specific Plan No. 6. The La Casa Via Neighborhood immediately southwest of the project site is subject to the provisions of the city's Specific Plan No. 1 and Specific Plan No. 3.

## **1. Specific Plan No. 6**

Specific Plan No. 6, adopted in 1978, applies to the greater La Casa Via area, including the La Casa Court and 230 La Casa Via Sites. The specific plan, which was developed to comply with the recommendations of the city's Open Space Action Program, limits residential density in these areas, but allows density exceptions with the provision of substantial amenities, and requires payment of special drainage infrastructure fees for the area.<sup>1</sup> "Area 1," which includes the La Casa Court Site, is originally designated in the specific plan for one dwelling unit per acre. The plan was amended in 1979 to allow a nine-unit subdivision on the La Casa Court Site.

As discussed in section III (Project Description) of this EIR, the project would require another amendment to the text and map of Specific Plan No. 6 to allow low-intensity medical uses on the La Casa Court Site.

## **2. Specific Plans No. 1 and No. 3**

Specific Plan No. 1, adopted in 1970 and amended in 1973, applies to the area located southwest of the 230 La Casa Via Site, including three privately-owned, undeveloped knolls. The specific plan, which is intended to maintain the area's rural character, establishes residential density and roadway requirements, designates a natural preserve area, and prevents development or landscaping on two knolls (Knolls A and B on Figure 35 in section IV.E.5, Public Services, Parks and Recreation), and restricts development on a third knoll (Knoll C on Figure 35).<sup>2</sup>

Specific Plan No. 3, adopted in 1975, also applies to the La Casa Via area, specifically Shell Ridge. Specific Plan No. 3 extends the Knoll C open space area identified in Specific Plan No. 1. The plan is intended to retain the rural character of the area by preserving scenic and natural features for the portion of Shell Ridge that lies between the area governed by Specific Plan No. 1 and city-owned open space. The plan calls for the designation of two natural preserve areas: (1) Knoll C, protected in part by Specific Plan No. 1; and (2) a second preserve that includes the sides and top of Shell Ridge.<sup>3</sup>

As discussed in section IV.E.5 (Public Services) of this EIR, the building envelopes proposed by the project Master Plan would not encroach on adjoining offsite open space areas, including the three knolls protected by these specific plans.

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<sup>1</sup>City of Walnut Creek, 1989 General Plan, page 2-21.

<sup>2</sup>City of Walnut Creek, 1989 General Plan, page 2-20.

<sup>3</sup>Ibid.



## C. MEASURE A

Measure A, an initiative approved by Walnut Creek voters in 1985, limits new building heights in the city to a maximum of six stories (89 feet) or to the height allowed in the applicable zoning districts, whichever is less. The Measure A requirements translate to the following building height restrictions on the project site:

- *Main Campus Site:* The maximum allowable building height is six stories (89 feet), in accordance with the Planned Development zoning (P-D 1647) for the site that was approved in 1986, following passage of Measure A. With a proposed maximum height of eight stories/89 feet for the Main Campus Site, the Master Plan complies with Measure A.
- *La Casa Court Site:* The proposed Master Plan maximum building height is 25 feet (or 29 feet with a pitched roof), in accordance with the Planned Development zoning (P-D 1443) in effect for this site at the time that Measure A was approved. With a maximum height of 25 feet for the La Casa Court Site, the project complies with Measure A.
- *230 La Casa Via Site:* This site is currently unincorporated, and therefore is not subject to the provisions of Measure A. Once the site is annexed to the city, the Measure A height restriction (six stories, or 89 feet) would apply, unless the city's zoning specifies a lower height limit. The Master Plan proposes a maximum building height of two stories (29 feet) on the 230 La Casa Via Site, which would be consistent with the Measure A height restriction.

## D. CONTRA COSTA COUNTY GENERAL PLAN

The 230 La Casa Via Site is currently unincorporated, and is therefore subject to the provisions of the Contra Costa County General Plan, 1990-2005. Since the project proposes annexation of the site to the city of Walnut Creek, the following discussion focuses on county general plan policies that are relevant to the proposed annexation.

### 1. General Plan Land Use Designations

a. Background. The Contra Costa County General Plan Land Use Map designates the 230 La Casa Via Site for *Single Family Residential, Very Low Density (SV)* uses (0.2 to 0.9 units per net acre).<sup>1</sup> The county Land Use Map designates the Main Campus Site for *Office (OF)* and *Public/Semi-Public (PS)* uses, and the La Casa Court Site for *Single Family Residential, Low Density (SL)* uses (0.2 to 0.9 units per net acre); these designations are advisory only, however, since these two sites are located within the city of Walnut Creek.

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<sup>1</sup>County of Contra Costa, Contra Costa County General Plan, 1990-2005 Land Use Map, approved by the Board of Supervisors on January 29, 1991.

b. Relationship to Proposed Project. The proposed Master Plan would allow low-intensity medical uses on the 230 La Casa Via Site, which would not be consistent with the existing SV land use designation of the Contra Costa County General Plan. As part of the project, the applicant proposes the site be annexed to the city of Walnut Creek and pre-zoned with a Planned Development (P-D) District that reflects the development standards outlined in the Master Plan. Once the site is annexed to the city, the land use designation of the Contra Costa County General Plan would no longer apply.

## **2. Urban Limit Line**

a. Background. The Contra Costa County General Plan establishes an *Urban Limit Line* (ULL) as a means of reconciling the recent increases in county growth pressures with the need to provide for the continued use of productive agricultural land. The ULL distinguishes between those lands that are intended to remain in agricultural production and rural use, and those lands that can be considered for urbanization. The purpose of the ULL is to identify and ensure protection of agricultural lands and open space areas by establishing a line beyond which no large-scale development may be considered within the duration of the county general plan (i.e., until 2005).

b. Relationship to Proposed Project. The entire project site, including the unincorporated 230 La Casa Via Site, is located within the ULL.<sup>1</sup> Consideration of the proposed urban development on the site would therefore be consistent with the ULL designation.

## **3. 65/35 Land Preservation Standard**

a. Background. In 1990, Contra Costa County voters passed Measure C, which established the *65/35 Land Preservation Standard* that was subsequently incorporated into the county's general plan. This standard requires that no more than 35 percent of the land in the county (including the urban areas of incorporated cities) contain urban development, and that the remaining 65 percent be preserved as agricultural land, open space, wetlands, parks, and/or other non-urban uses. The *Urban Limit Line* (see above) works to enforce the *65/35 Land Preservation Standard*.

According to the Contra Costa County General Plan (Table 3-3, page 3-18), the county contains a total land area of 480,000 acres, of which 312,000 acres (65 percent) should remain in non-urban uses and 168,000 acres (35 percent) are available for urban uses under the *65/35 Land Preservation Standard*. The ULL encompasses a total of 219,000 acres, of which 144,018 acres are designated for urban uses by the General Plan; the remaining 74,982 acres are dedicated to open space or agriculture.

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<sup>1</sup>County of Contra Costa, Contra Costa County General Plan, 1990-2005 65/35 Contra Costa County Land Preservation Plan Map, adopted by the Board of Supervisors on January 29, 1991.

In accordance with Measure C, the county has advised the Local Agency Formation Commission (LAFCO) to (1) respect and support the county's *65/35 Land Preservation Standard, Urban Limit Line*, and growth management standards when considering requests for incorporation or annexation to cities or service districts; (2) apply the stricter growth management standards of either the county, the incorporating city, or the annexing city or service district when considering requests for incorporation or annexations of land to cities or service districts; and (3) require that unincorporated land located within the ULL that is to be incorporated into a new city or annexed to a city be used to provide a fair share of affordable housing when and if such land is developed.

b. Relationship to Proposed Project. The project would be consistent with the *65/35 Land Preservation Standard*, since the entire project site, including the 230 La Casa Via Site, is located within the ULL and is designated for urban uses. The project does not propose affordable housing development on the 230 La Casa Via Site, however, as recommended by Measure C for unincorporated land proposed for annexation to a city.

#### 4. Other County General Plan Policies

Since the project proposes annexation of the 230 La Casa Via Site to the city of Walnut Creek, Contra Costa County General Plan policies that address urban development and other issues in unincorporated areas are not directly relevant to the project.

County policies that would remain relevant to the proposed project, in addition to those discussed above, are those that address growth management. The following discussion focuses on these policies.

The *Growth Management Element* of the county general plan establishes performance standards for urban development, which are paraphrased below.<sup>1</sup> As noted above under "3. 65/35 Land Preservation Standard," Measure C directs LAFCO, in its review of annexation requests, to consider these growth management standards along with those of the annexing city and/or service district.

#### Traffic Standard

LOS standards will be considered met if:

- measurement of actual conditions at the intersection indicates that operations are equivalent to or better than those specified in the standard; or

#### Project Relationship

Traffic generated by the project, including development on the currently unincorporated 230 La Casa Via Site, would produce significant unavoidable impacts on Ygnacio Valley Road, as described in section IV.C (Transportation

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<sup>1</sup>County of Contra Costa, Contra Costa County General Plan, 1990-2005, January 1991, pages 4-6 through 4-12.



- the County has included projects in its adopted capital improvement program which, when constructed, will result in operations equal to or better than the standard.

#### Water Standard

New development shall illustrate that adequate water quantity and quality can be provided.

#### Sanitary Sewer Standard

New development shall demonstrate that adequate sanitary sewer quantity and quality can be provided.

#### Fire Protection Standard

Fire stations shall be located within one and one-half miles of developments in urban, suburban and central business district areas. Automatic fire sprinkler systems may be used to satisfy this standard.

#### Public Protection Standard

A Sheriff facility standard of 155 feet of station area per 1,000 population shall be maintained within the unincorporated area of the County.

#### Flood Control and Drainage Standard

Major new development shall finance the full costs of drainage improvements

and Parking) of this EIR. The county general plan, however, does not establish an LOS standard for this segment of Ygnacio Valley Road, which is located within the Walnut Creek city limits.

#### Project Relationship

The project would comply with this standard. (See section IV.E, Public Services, subsection 4, Water Service.)

#### Project Relationship

The project would comply with this standard, provided that the mitigation measures identified in section IV.E (Public Services), subsection 3 (Sewer Service) of this EIR are implemented.

#### Project Relationship

The project would comply with this standard. (See section IV.E, Public Services, subsection 1, Fire Protection and Emergency Medical Services.)

#### Project Relationship

This standard would not apply to the project, since the 230 La Casa Via Site is proposed to be annexed to the city of Walnut Creek and the remaining portions of the project site are already located within the city limits; the project site would therefore not be served by the County Sheriff's Department.

#### Project Relationship

The project would comply with this standard provided that the mitigation

necessary to accommodate peak flows due to the project...Development shall not be allowed in flood prone areas designated by the Federal Emergency Management Agency until a risk assessment and other technical studies have been performed.

measures identified in section IV.I.3 (Drainage and Water Quality) of this EIR are met. The project site, including the 230 La Casa Via Site, is not located within a designated flood-prone area.

## **E. LAFCO CRITERIA**

The proposed project includes a request for annexation of the 230 La Casa Via Site to the city of Walnut Creek. The annexation request will be reviewed by the Contra Costa County Local Agency Formation Commission (LAFCO), which is required to consider the following factors, as set forth in Government Code Section 56841, in evaluating annexation proposals:

- a. Population, population density; land area and land use; per capita assessed valuation; topography, natural boundaries, and drainage basins; proximity to other populated areas; the likelihood of significant growth in the area, and in adjacent incorporated and unincorporated areas, during the next 10 years.**

These factors are evaluated in sections IV.A (Land Use), IV.D (Employment and Housing), IV.H (Soils, Geology, and Seismicity), and IV.I (Drainage and Water Quality) of this EIR.

- b. Need for organized community services; the present cost and adequacy of governmental services and controls in the area; probable future needs for those services and controls; probable effect of the proposed...annexation...and of alternative courses of action on the cost and adequacy of services and controls in the area and adjacent areas.**

'Services,' as used in this subdivision, refers to governmental services whether or not the services are services which would be provided by local agencies subject to this division, and includes the public facilities necessary to provide those services.

Section IV.E (Public Services) of this EIR evaluates existing public facilities and services in the project area, and project impacts on these facilities and services. Section VI (Alternatives to the Proposed Project) reviews the impacts of alternative actions on public facilities and services.

- c. The effect of the proposed action and of alternative actions, on adjacent areas, on mutual social and economic interests, and on the local government structure of the county.**

These non-environmental factors are not addressed in this EIR. This type of analysis not required as part of environmental review under the California Environmental Quality Act (CEQA).<sup>1</sup>

**d. The conformity of both the proposal and its anticipated effects with both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities set forth in Section 56377.**

The Contra Costa County LAFCO has not adopted policies regarding urban development patterns,<sup>2</sup> and therefore uses the policies and priorities set forth in Government Code Section 56377 to evaluate these factors. Section 56377 sets forth the following policies and priorities to be considered by LAFCO in reviewing annexation proposals:

- (a) *Development or use of land for other than open-space uses shall be guided away from existing prime agricultural lands in open-space use toward areas containing nonprime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.*
- (b) *Development of existing vacant or nonprime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the sphere of influence of a local agency should be encouraged before any proposal is approved which would allow for or lead to the development of existing open-space lands for non-open space uses which are outside of the existing jurisdiction of the local agency or outside of the existing sphere of influence of the local agency.*

No prime agricultural lands have been identified on the 230 La Casa Via Site or in the vicinity.<sup>3</sup> The unincorporated 230 La Casa Via Site is located within the Sphere of Influence of the city of Walnut Creek.

**e. The effect of the proposal on maintaining the physical and economic integrity of agricultural lands, as defined by Section 56016.**

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<sup>1</sup>CEQA Guidelines Section 15131 states that "economic or social information may be included in an EIR or may be presented in whatever form the agency desires," and that "economic or social effects of a project shall not be treated as significant effects on the environment."

<sup>2</sup>Telephone conversation with LAFCO staff, March 28, 1995.

<sup>3</sup>Prime agricultural soils are typically considered to be those rated as Class I and II soils by the U.S. Department of Agriculture Soil Conservation Service (USDA SCS). The 230 La Casa Court Site is comprised of Class IV soils, and the remainder of the project site is comprised of soil Classes IV, VI, and VII, according to the Soil Survey of Contra Costa County, California published by the USDA SCS (September 1977).



Government Code Section 56016 defines "agricultural lands" as lands currently used for the purpose of producing an agricultural commodity for commercial purposes, land left fallow under a crop rotational program, or land enrolled in an agricultural subsidy or set-aside program. The unincorporated 230 La Casa Via Site and adjacent properties do not fit this definition of "agricultural lands." As discussed in section IV.G (Health and Safety) of this EIR, the 230 La Casa Via Site contains the remnants of a walnut orchard, but this orchard was planted by the former owner/resident of the site and was not used for commercial purposes.

- f. The definiteness and certainty of the boundaries of the territory, the nonconformance of proposed boundaries with lines of assessment or ownership, the creation of islands or corridors of unincorporated territory, and other similar matters affecting the proposed boundaries.**

The proposed annexation of the 230 La Casa Via Site would encompass a single, 6.25-acre parcel. The site is located immediately adjacent to the existing Walnut Creek city limits in an existing "island" of unincorporated territory.<sup>1</sup> The proposed annexation would reduce the size of the unincorporated "island."

- g. Consistency with city or county general and specific plans.**

Subsections A through D above evaluate project consistency with the City of Walnut Creek 1989 General Plan, relevant city-adopted specific plans, Measure A, and the Contra Costa County General Plan, 1990-2005, and cite mitigations identified in this EIR which would improve project consistency with applicable city and county general and specific plans.

- h. The sphere of influence of any local agency which may be applicable to the proposal being reviewed.**

As noted under item d, the unincorporated 230 La Casa Via Site is located within the city of Walnut Creek Sphere of Influence. The site is also located within the Contra Costa County Fire Protection District (CCCFPD) service boundary (see section IV.E.1, Public Services, of this EIR).

- i. The comments of any affected local agency.**

Affected local agencies have the opportunity to express comments on the project in part by responding to the Notice of Preparation (NOP) for this EIR, and by commenting on this Draft EIR. These comments are available in public records maintained by the Lead Agency, the city of Walnut Creek.

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<sup>1</sup>City of Walnut Creek, 1989 General Plan, Figure 1-2, page 1-13.

## **F. PERTINENT REGIONAL PLANS**

### **1. Contra Costa County Congestion Management Plan**

The Contra Costa Transportation Agency (CCTA) has prepared the Contra Costa County Congestion Management Plan (CMP) in compliance with state law. The CMP contains the following five state-mandated elements:

- traffic Level of Service (LOS) standards applied to a designated system of state highways and principal arterial streets;
- standards for public transit addressing frequency, routing, and coordination of service provided by separate operators;
- a seven-year capital improvement program (CIP) to maintain or improve the traffic level of service and transit performance standards (Chapter 4);
- a program to analyze the impacts of land use decisions made by local jurisdictions on regional transportation systems (Chapter 5); and
- a trip reduction and travel demand element (Chapter 6).

The Transportation and Parking section of this EIR (section IV.C) has been prepared in a manner consistent with the requirements of the CMP.

### **2. Action Plan for Routes of Regional Significance**

TRANSPAC (Transportation Partnership and Cooperation, the sub-regional transportation planning agency for the subregion in which the project site is located) has developed an Action Plan for Routes of Regional Significance in association with the CCTA. Adopted by TRANSPAC on December 1, 1994, the Action Plan establishes policies and "traffic service objectives" for "Routes of Regional Significance," and identifies actions to be taken by local jurisdictions to achieve the traffic service objectives.

Section IV.C (Transportation and Parking) of this EIR describes the Action Plan in more detail. The traffic service objectives from the Action Plan form a basis for identifying significant traffic impacts in section IV.C (see subsection 2(a)(2), "CCTA Criteria").

### **3. Proposed Land Use Policy Framework (ABAG)**

The most recent regional land use policy document adopted by the Association of Bay Area Governments (ABAG) is entitled A Proposed Land Use Policy Framework for the San Francisco Bay Area, and was adopted by the ABAG Executive Board in July 1990. The document is described as a policy framework for future land use decisions in the Bay Area that respects the need for strong local control, but that also recognizes the importance of

regional comprehensive planning for issues of regional significance. The following subsection evaluates the project's relationship to the five major policies set forth in this ABAG policy document.

#### ABAG Policy

- a. Direct growth where regional infrastructure capacity, such as freeway, transit, water, solid waste disposal and sewage treatment is available or committed, and where natural resources will not be overburdened.
- b. Encourage development patterns and policies that discourage long distance automobile commuting and increase resident access to employment, shopping, and recreation by transit or non-auto means.
- c. Establish firm growth boundaries for the urban areas of the Bay Area. Direct and permit urban development only within these growth boundaries.

#### Project Relationship

Sections IV.C (Transportation and Parking) and IV.E (Public Services) evaluate project impacts on local and subregional infrastructure capacity. The transportation analysis identifies significant unavoidable impacts of project-related traffic on Ygnacio Valley Road, which TRANSPAC has identified as a "Route of Regional Significance." Project impacts on public services and utilities would be reduced to an insignificant level through the mitigation measures identified in section IV.E this EIR.

The proposed medical center expansion would create new jobs within the city, thereby contributing to Walnut Creek's continuing jobs/housing imbalance, in which a substantial number of people who are employed in Walnut Creek commute from outside the city (see section IV.D, Employment and Housing, of this EIR). Section IV.C (Transportation and Parking) recommends measures to encourage walking and transit use in the project vicinity.

The project site, with the exception of the 230 La Casa Via Site, is located within the existing Walnut Creek city limits. The 230 La Casa Via Site is currently unincorporated, and is proposed for annexation to the city of Walnut Creek as part of the project. The 230 La Casa Via Site is located within the existing city of Walnut Creek Sphere of Influence, and within the *Urban Limit Line* established by the Contra Costa County General Plan,



d. Encourage the provision of housing opportunities at all levels.

1990-2005 (see discussion under subsection D, "Contra Costa County General Plan," above).

The project does not include development of new housing. The project proposes an amendment to the city of Walnut Creek 1989 General Plan to redesignate (1) the southeastern portion of the La Casa Court Site from *Single Family Low (SFL)* to *Hospital (HO)*, and (2) the 230 La Casa Via Site from *Single Family Very Low (SFVL)* to *HO* (see discussion under subsection A, "City of Walnut Creek General Plan," above).

The Contra Costa County General Plan, 1990-2005 also designates the 230 La Casa Via Site for very low density single-family housing (see subsection D, "Contra Costa County General Plan," above).

The project would prevent new housing development on these portions of the project site.

#### 4. Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) Bay Area '94 Clean Air Plan, adopted in December 1994, proposes the imposition of controls on stationary sources of air emissions (e.g., factories, power plants, industrial sources) and Transportation Control Measures designed to reduce emissions from automobiles. BAAQMD calls for air quality effects to be analyzed in environmental impact reports for development projects, subject to BAAQMD review. Section IV.J (Air Quality) of this EIR provides an analysis of air quality impacts which has been prepared in keeping with BAAQMD guidelines for Environmental Impact Assessment, and evaluates project consistency with BAAQMD air emissions standards. The analysis concludes that long-term project operations, including project-related traffic, would not have significant effects on air quality, and that short-term construction-related impacts could be mitigated through measures to reduce construction dust.



## VI. ALTERNATIVES TO THE PROPOSED PROJECT





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## VI. ALTERNATIVES TO THE PROPOSED PROJECT

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Section 15126(d) of the California Environmental Quality Act (CEQA) Guidelines states that an EIR should *"Describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."*

The April 10 and December 2, 1995, the John Muir Medical Center Master Plan application described in section III of this EIR has been considered as "the project," and has been analyzed in detail in this EIR. Five alternatives to the project are described and evaluated in this chapter to meet CEQA requirements for EIR content and to provide a basis for further understanding of project environmental effects and possible approaches to reducing significant impacts. The five alternatives are:

- **Alternative A: No Project.** Under this CEQA-required alternative, the three project subareas would be left in their current condition either with existing medical center uses or vacant.
- **Alternative B: Expansion Under Current Entitlements.** This alternative assumes full buildout of the Main Campus, La Casa Court and 230 La Casa Via sites under current city and county entitlements (i.e., Phase IV of the medical center, a residential subdivision, and a congregate care complex), plus full buildout of the general-plan permitted medical office space use at the 185 La Casa Via portion of the La Casa Court site. No changes are assumed for the Schulze Property, since its development potential would be limited by the current open space easement applicable to this site.
- **Alternative C: Reduced Expansion with Revised Envelope.** This alternative assumes development of the three project subareas with a 25 percent reduction in the overall maximum permitted floor area (i.e., a maximum of 624,750 square feet of new development in-lieu of the proposed maximum of 833,000 square feet of new development).
- **Alternative D: Mitigated Master Plan.** This alternative assumes a Master Plan that allows 833,000 square feet of new development as proposed by the applicant, but with incorporation of the various onsite mitigation measures recommended in this EIR to eliminate or reduce identified impacts.
- **Alternative E: Alternative Sites.** This alternative evaluates the feasibility of providing all or a portion of the medical center expansion project at an alternative site or sites as a means of meeting the basic project objectives with fewer significant environmental impacts.

## **A. NO PROJECT**

### **1. Principal Characteristics**

Under this CEQA-required alternative,<sup>1</sup> the project subareas would remain unaltered from their current condition, as follows: (a) the Main Campus Site would retain the existing 365,000-square-foot medical center facility and associated parking lots, driveways and site vegetation; (b) the La Casa Court Site would retain the existing 2,000-square-foot medical office building with associated parking and vegetation, as well as the existing vacant land and cul-de-sac; (c) the 230 La Casa Via Site would remain as a vacant parcel with no change to vegetation; and (d) the Schulze Property would retain its existing single-family house. No improvements would be made to these existing site conditions.

### **2. Comparative Impacts and Mitigating Effects**

a. Land Use. None of the construction period or long-term land use compatibility impacts identified in this EIR would occur with the no project alternative. The La Casa Court and 230 La Casa Via Sites would remain largely unused, and none of the proposed urban design features would be realized.

b. Urban Design and Visual Factors. No change in the current visual characteristics of the project subareas would occur with this alternative. Existing views of Mount Diablo from La Casa Via would be retained. The views of Mount Diablo from the frontage segment of Ygnacio Valley Road would remain blocked.

c. Transportation and Parking. The significant adverse traffic and parking impacts identified in this EIR would not occur. No new traffic would be added to the local and regional circulation system from the project subareas. The existing internal circulation system on the Main Campus Site would remain. The benefits to the La Casa Via neighborhood of a modified access configuration would not be realized.

d. Employment and Housing. This alternative would produce no changes in existing employment and housing characteristics in Walnut Creek and elsewhere in Contra Costa County.

e. Public Services. The no project alternative would have no impacts on public services.

f. Noise and Vibration. With the no project alternative, there would be no on- or off-site medical uses exposed to construction period noise and vibration levels, and there would be no project-related increase in local roadway noise levels.

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<sup>1</sup>California Environmental Quality Act, Section 15126(d).



g. Health and Safety. With the no project alternative, there would no change to the existing levels of risk of exposure to hazardous waste or other hazardous substances within the JMMC complex.

h. Soils, Geology and Seismicity. This alternative would have no impacts pertaining to existing soil and seismic conditions in the project area.

i. Drainage and Water Quality. The existing drainage and runoff characteristics of the project subareas would remain unaltered with the no project alternative. There would be no change in the volume or rate of storm water runoff, or in the type or amount of non-point urban surface pollutants contained in runoff flows.

j. Air Quality. There would be no additional impacts on local and regional air quality with the no project alternative.

k. Vegetation and Wildlife. No adverse impacts to existing onsite trees or other habitat values would occur with this alternative, since the project subareas would remain unaltered.

l. Cultural Resources. No impacts on cultural resources would occur with the no project alternative.

## **B. EXPANSION UNDER CURRENT ENTITLEMENTS**

### **1. Principal Characteristics**

For the entire Main Campus and 230 La Casa Via sites and for a significant portion of the La Casa Court Site, this alternative assumes construction of previously-approved projects for which JMMC retains entitlements. For the 185 La Casa Via portion of the La Casa Court Site, where no project has been previously approved, this alternative assumes maximum buildout under the current City of Walnut Creek 1989 General Plan land use designation. The specific development characteristics assumed under this alternative for each project subarea are described below.

a. Main Campus Site. As shown on Figure 42, existing entitlements on this site allow construction of Phase IV of the previously approved medical center expansion plan, including (1) a three-story, 400-space parking garage at the southeastern corner of the site with access off of La Casa Via; (2) a five-story, 86,000 square foot "bed tower" with traditional hospital functions located north of the Phase III building; (3) three-to-four story medical office buildings comprising a total of 35,000 square feet and containing one level of parking on the ground floor at the southwestern corner of the site adjacent to the 1515 Ygnacio Valley Road building; and (4) a two-story parking structure at the southern edge of the site with access from La Casa Via. This alternative assumes full buildout of this approved project.

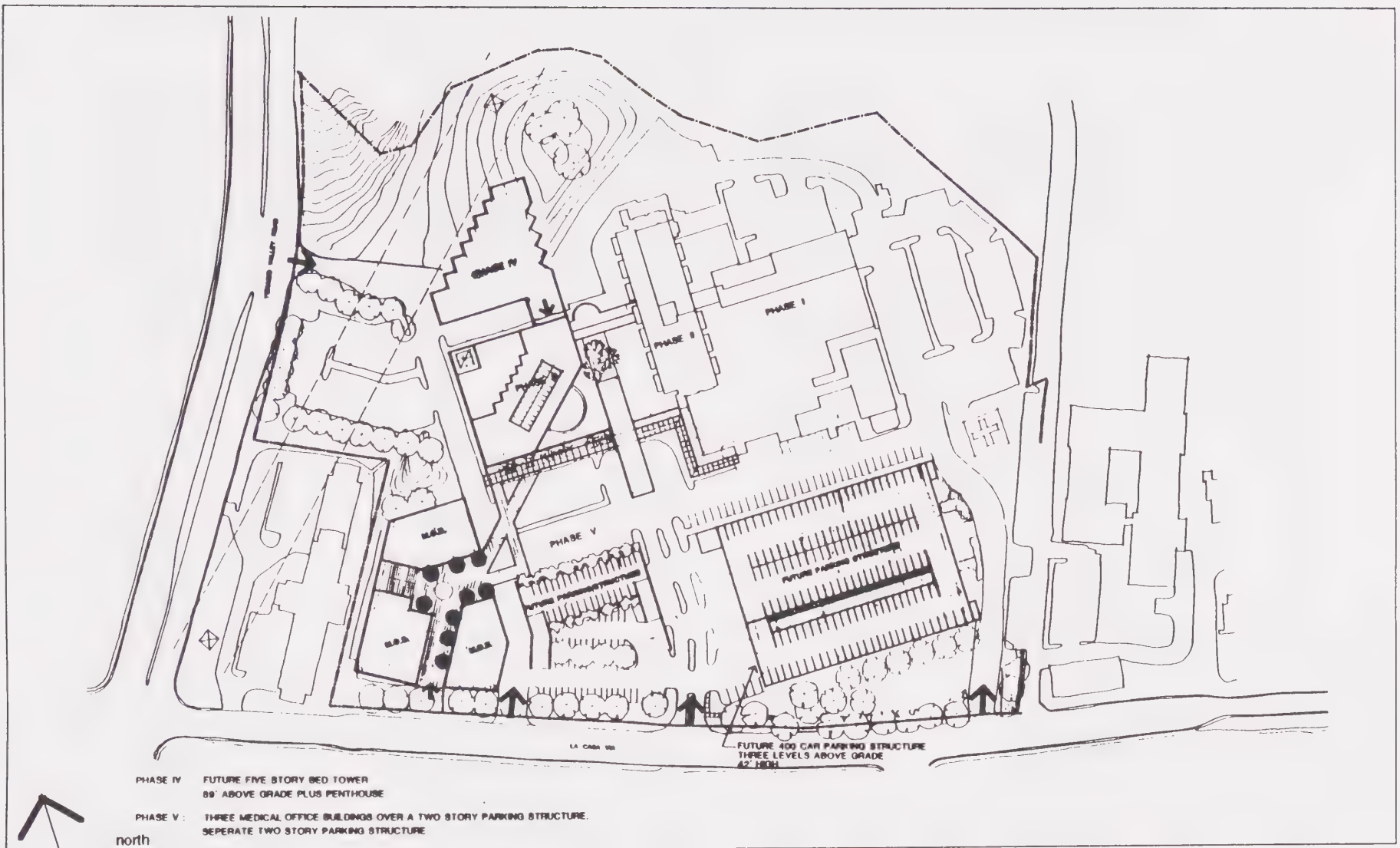


Figure 42  
**SITE PLAN FOR ALTERNATIVE B--EXPANSION  
 UNDER CURRENT ENTITLEMENTS  
 MAIN CAMPUS SITE**

SOURCE: Henningson, Durham and Richardson, 1986

b. La Casa Court Site. The La Casa Court Site is assumed to be developed with two distinct uses, as follows:

(1) *185 La Casa Via.* The 2.23-acre parcel at 185 La Casa Via, which is located within the western portion of the La Casa Court Site, is assumed to be built with medical office to the maximum floor area permitted by the general plan. The property is currently designated *Office* by the general plan and is allowed a maximum F.A.R. of 0.50, which equates to a maximum of approximately 48,569 square feet of medical office development, which is all assumed to be constructed under this alternative.

(2) *La Casa Court Subdivision.* JMMC maintains entitlements to construct a 9-lot single family residential subdivision on a 4.94-acre portion of the La Casa Court Site, which is assumed to be fully constructed under this alternative.

c. 230 La Casa Via. As illustrated on Figure 43, JMMC maintains entitlements to construct a 196-bed congregate care facility at the 230 La Casa Via Site, which is assumed to be fully constructed under this alternative.

## **2. Comparative Impacts and Mitigating Effects**

a. Land Use. Overall, somewhat less-intensive construction period compatibility impacts on existing adjacent and internal land uses would be expected to occur under this alternative. Development of the eastern portion of the La Casa Court Site with single family homes would not raise any compatibility issues relative to the residential neighborhood to the east. Other than short-term construction impacts, this alternative would not be expected to result in significant compatibility impacts on Walnut Creek Hospital. However, the F.A.R. for the 230 La Casa Via site would be more intense than that proposed in the project,<sup>1</sup> resulting in greater land use compatibility impacts on the adjacent La Casa Via neighborhood.

b. Urban Design and Visual Factors. As with the proposed project, views of Mount Diablo would be obscured from La Casa Via under this alternative. Beneficial urban design effects, such as the east-west, Medical Center Way corridor and the neighborhood entrance "gate" and traffic circle on La Casa Via, would not be realized. Even though this alternative would allow a lower level of overall development, it would be realized in a less coordinated fashion, offsetting some of the beneficial effects of lower-intensity development.

c. Transportation and Parking. As shown in Table 35, which compares vehicular trip generation characteristics of the five alternatives, this alternative would be expected to result

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<sup>1</sup>The floor area of the approved 230 La Casa Via congregate care facility is not specified in the associated EIR for that project. However, assuming an average of 1,200 square feet per unit, including common areas, it would result in 235,200 square feet, in excess of the 150,000 square feet which would be allowed at the 230 La Casa Via Site under the proposed Master Plan.



1420 Corvey Ct

1450 Corvey Court

American Baptist Community Church

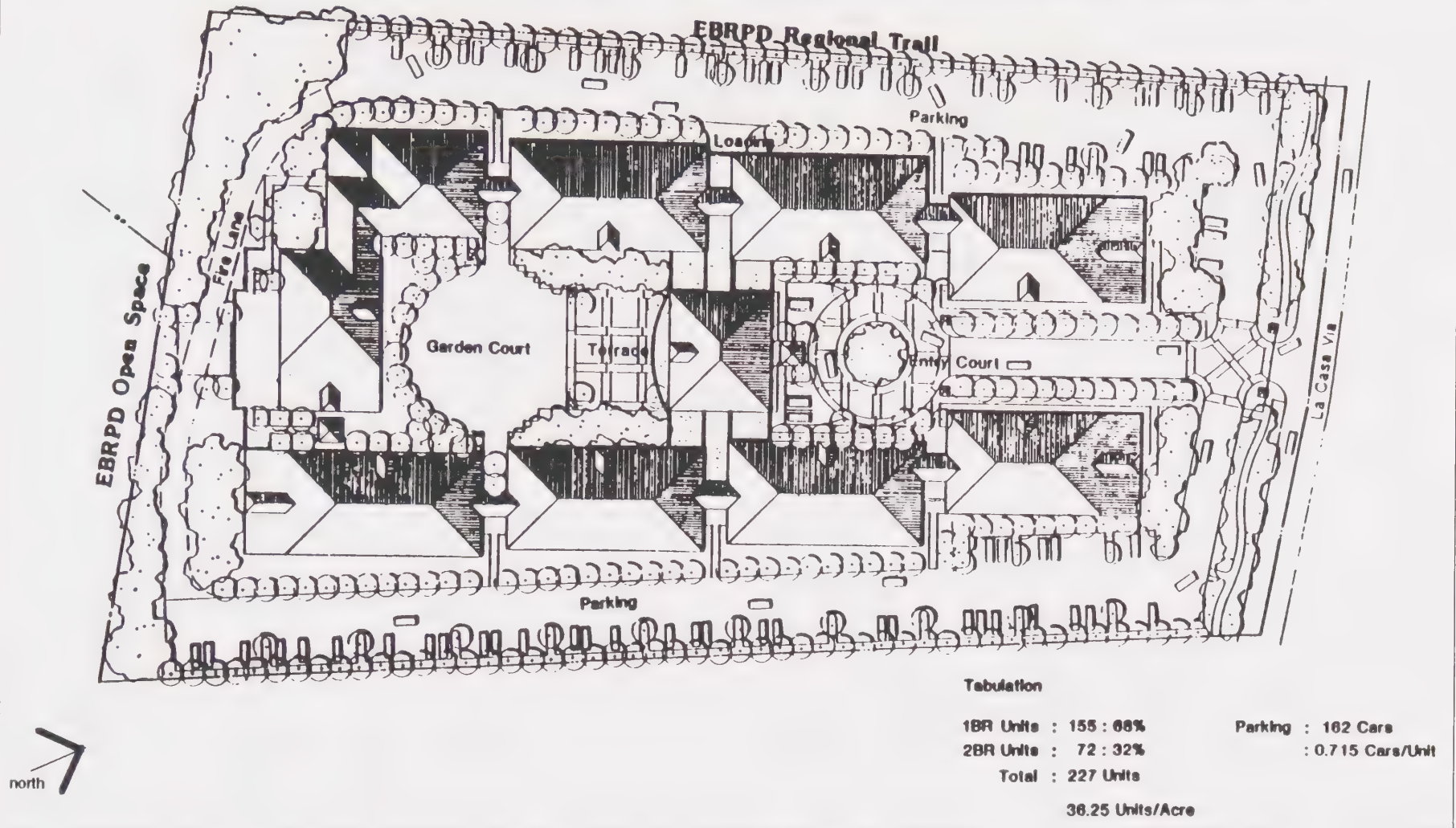


Figure 43

## SITE PLAN FOR ALTERNATIVE B--EXPANSION UNDER CURRENT ENTITLEMENTS

230 LA CASA VIA SITE

SOURCE: Draft EIR for Perma-Bilt General Plan Amendment, 1987

Table 35

PROJECT ALTERNATIVES TRIP GENERATION COMPARISON

<u>Alternative</u>	<u>Characteristics</u>	<u>AM Trip Rates</u>	<u>AM Trips</u>	<u>PM Trip Rates</u>	<u>PM Trips</u>
A. No Project Alternative	--	--	0	--	0
B. Expansion Under Current Entitlements	86,000 sq. ft. new hospital	1.15/1,000 sf	99	0.91/1,000 sf	78
	235,200 sq. ft. new <sup>1</sup> congregate care	0.23/1,000 sf	54	0.25/1,000 sf	59
	83,569 sq. ft. new medical office	2.69/1,000 sf	225	4.08/1,000 sf	341
	9 single family homes	0.65/unit	6	0.92/unit	8
	<i>Total Additional Peak Trips for Alternative B</i>		384		486
C. Reduced Expansion With Revised Envelope	367,415 sq. ft. new hospital	1.15/1,000 sf	423	0.91/1,000 sf	334
	197,950 sq. ft. new congregate care	0.23/1,000 sf	46	0.25/1,000 sf	49
	59,385 sq. ft. new medical office	2.69/1,000 sf	160	4.08/1,000 sf	242
	<i>Total Additional Peak Trips for Alternative C</i>		629		625
D. Mitigated Master Plan Alternative	523,000 sq. ft. hospital	1.15/1,000 sf	607	0.91/1,000 sf	480
	230,000 sq. ft. continuing care	0.23/1,000sf	55	0.25/1,000 sf	60
	72,000 sq. ft. medical office	2.69/1,000 sf	194	4.08/1,000 sf	294
	<i>Total Additional Peak Trips for Alternative D</i>		856		834
E. Off-Site Alternative (Medical Office Uses Off-site)	<u>Project Subareas:</u>				
	523,000 sq. ft. hospital	1.15/1,000 sf	607	0.91/1,000 sf	480
	230,000 sq. ft. continuing care	0.23/1,000sf	55	0.25/1,000 sf	60
	<i>Total Additional Peak Trips for Alternative E</i>		662		540
	<u>Off-site (Shadelands):</u>				
	72,000 sq. ft. medical office	2.69/1,000 sf	194	4.08/1,000 sf	294

SOURCE: Wagstaff and Associates.

<sup>1</sup> Assumes 1,200 square feet per unit, including common areas.

in a total of 384 AM peak trips (of which approximately 67 percent would be inbound) and 486 PM peak trips (of which approximately 66 percent would be outbound). This would represent approximately a 55 percent reduction in the number of AM peak trips, and approximately a 42 percent reduction in the number of PM peak trips, which are expected at Master Plan buildout. However, based on the criteria described in section IV.C.2.a of this EIR, the level of traffic increase under this alternative, although substantially reduced, would still be considered a *significant adverse impact*.

Because this alternative includes new parking structures with direct access from La Casa Via, as well as a service drive access re-routed from the Ygnacio Valley Road driveway to La Casa Via, this alternative would be expected to result in a larger proportion of the JMMC-related trips distributed to La Casa Via rather than the JMMC north driveway to Ygnacio Valley Road or, in comparison to the Acquisition Option, the proposed Medical Center Way access to Ygnacio Valley Road.

d. Employment and Housing. The land uses associated with this alternative would create approximately 1,614 new jobs, 1,713 fewer than estimated for the proposed project (3,327 jobs). This estimate assumes buildout under this alternative of (1) 121,000 square feet of hospital and medical office uses on the Main Campus Site, (2) 48,569 square feet of medical offices on the La Casa Court Site, replacing the existing medical offices (which provide five jobs) at 185 La Casa Via, and (3) a 196-bed congregate care facility at 230 La Casa Via, with an average of 1,200 square feet per bed for a total of 235,200 square feet. These square footages were multiplied by 0.004 employee per square foot, the average employment ratio at the existing John Muir Medical Center, to arrive at the estimate of 1,614 new jobs. The secondary employment "multiplier" effects and associated housing demand impacts of the project, would be correspondingly reduced under this alternative.

e. Public Services. Although the overall development size would be lower under this alternative, the housing component would result in greater overall public services impacts than the proposed project, particularly on schools and parks.

f. Noise and Vibration. Under this alternative, exposure of sensitive existing medical uses to expansion construction noise would probably be similar to that of the proposed project, except for a shorter total duration due to the reduced amount of building area which would be permitted. Traffic-related noise impacts would also be lower due to lower traffic increases under this alternative.

g. Health and Safety. The increased risk of human exposure to hazardous substances would be expected to be slightly lower under this alternative than that under the proposed project, corresponding to the relative reduction in total new hospital floor area.

h. Soils, Geology and Seismicity. Geotechnical impacts under this alternative would be similar to the proposed project.



i. Drainage and Water Quality. For the portion of the La Casa Court Site which would contain single family homes, this alternative would be expected to result in a slightly reduced overall drainage impact, because single family homes generally have a lower proportion of impervious surfaces than medical uses. For the remainder of the project subareas, the impacts of buildout on drainage and water quality would be comparable to those associated with the proposed project.

j. Air Quality. Expansion under current entitlements would result in a comparative reduction in construction period dust impacts from those generated by the proposed project due to the overall lower level of new construction which would be permitted. Similarly, long-term impacts on local and regional air quality would be lower under this alternative due to reduced traffic generation and congestion.

k. Vegetation and Wildlife. In comparison with buildout of the proposed Master Plan, this alternative would have similar adverse effects on existing onsite trees and open space values.

l. Cultural Resources. Under this alternative, potential impacts to currently unidentified subsurface cultural resources would be similar to those identified herein for the proposed Master Plan.

## **C. REDUCED EXPANSION WITH REVISED BUILDING ENVELOPE**

### **1. Principal Characteristics**

This alternative assumes that the overall project development (floor area) capacity would be reduced by approximately 25 percent as a means of reducing the various identified adverse project impacts, particularly the identified "significant unavoidable" traffic impacts. This Master plan alternative would allow a maximum of 624,250 square feet of new medical square footage in-lieu of the 833,000-square-foot maximum expansion that would be allowed under the proposed Master Plan. Including the existing 365,000-square-foot medical center, this alternative would allow a total of 989,250 square feet of medical-related floor area at the three main project subareas, including:

- up to 732,415 square feet of hospital floor area (74 percent of the total permitted square footage),
- 197,950 square feet of continuing care use (20 percent of the total permitted square footage), and
- up to 59,385 square feet of medical office use (6 percent of the total).

Similar to the proposed project, these uses could be divided among the three main project subareas. As part of the overall reduction in project intensity, the maximum F.A.R. and building envelope for each of these subareas would be reduced as follows:

(a) Main Campus Site. Under this alternative, the Main Campus Site would be allowed a maximum of 401,250 square feet of new floor area (instead of the 535,000 square feet proposed in the project Master Plan). Including the existing medical center buildings, a total of 766,250 square feet would be allowed at the Main Campus Site (instead of the 900,000 square feet allowed by the project Master Plan). This would result in a maximum F.A.R. of 0.98 at the Main Campus Site (instead of the 1.15 proposed in the project Master Plan application).

Commensurate with the reduction in floor area ratio, this alternative also assumes an approximate 25 percent reduction in *overall building envelope*. For instance, it assumes that the proposed average 25-foot setback off of La Casa Via for the Main Campus Site would instead be a minimum of 31 feet, and that the portion proposed to be six stories and 89 feet in height would instead be a maximum of five stories and 67 feet in height.

(b) La Casa Court Site. The La Casa Court Site would be allowed a maximum of 110,500 square feet of new development, which, when added to the existing 2,000-square-foot building at the site, would yield a maximum of 112,500 square feet of medical floor area, in comparison to the total of 150,000 square feet of medical floor area allowed under the proposed Master Plan. This would result in a maximum F.A.R. of 0.36 instead of the 0.48 proposed in the Master Plan.

Commensurate with the floor area reduction, this alternative also assumes an approximate 25 percent reduction in overall building envelope. For instance, it assumes that the proposed 25-foot average setback from La Casa Via for the La Casa Court Site would instead be 31 feet, and the average 45-foot setback from the east property line would instead be 56 feet.

(c) 230 La Casa Via Site. The currently vacant 230 La Casa Via Site would be allowed a maximum of 112,500 square feet of new development, as compared to 150,000 square feet under the proposed Master Plan. This would result in a maximum F.A.R. of 0.41 instead of the 0.55 proposed in the Master Plan.

Commensurate with the reduction in floor area, this alternative also assumes an approximate 25 percent reduction in overall building envelope similar to that described for the La Casa Court Site above.

(d) Schulze Property. No changes are assumed to the Schulze property under this alternative.

## **2. Comparative Impacts and Mitigating Effects**

a. Land Use. Because this alternative would result in lower-density, less intensive development of the project subareas, it would be expected to result in reduced land use incompatibility impacts on surrounding established single family residential uses. The impacts on the use of Walnut Creek Hospital would be similar to that of the proposed project. This

alternative would also have construction period land use compatibility impacts similar to the project.

b. Visual and Urban Design Factors. At buildout, this alternative is assumed to contain all of the urban infrastructure and landscaping improvements specified in the proposed Master Plan, as well as similar urban design guidelines and standards. Because the overall permitted building massing would be lower, this alternative would be expected to result in less visual impact, with greater opportunities for opening views of Mount Diablo from surrounding streets.

c. Transportation and Parking. As shown in Table 36, this alternative would be expected to result in a total of 629 AM peak trips (of which approximately 67 percent would be inbound) and 625 PM peak trips (of which approximately 66 percent would be outbound). This would represent approximately a 25 percent reduction in the AM and PM peak trip total anticipated at Master Plan buildout. However, based on the criteria described in section IV.C.2.a of this EIR, the reduced level of traffic increase would still be considered a significant adverse impact.

d. Employment and Housing. The land uses associated with this alternative would create approximately 2,497 primary jobs, 830 (or 25 percent) fewer than estimated for the proposed project (3,327 jobs). This estimate is based on build-out of 624,250 square feet of new medical square footage, with an employment ratio of 0.004 employee per square foot (the employment ratio at the existing John Muir Medical Center). Secondary employment "multiplier" effects and associated housing demand impacts would be correspondingly reduced under this alternative.

e. Public Services. Because this alternative assumes an overall 25 percent reduction in the allowable floor area as compared to the proposed Master Plan, it would be expected to result in corresponding reductions in project impacts on public services.

f. Noise and Vibration. Noise and vibration impacts under this alternative would be similar to those described for the project. However due to the smaller project size, transportation-related noise impacts would be slightly reduced from those of the proposed project.

g. Health and Safety. Health and safety risks (i.e., potential human exposure to hazardous substances) under this alternative would be similar to the proposed project.

h. Soils, Geology and Seismicity. Effects related to soils, geology and seismicity would be similar to the proposed project.

i. Drainage and Water Quality. This alternative would result in similar drainage and water quality effects as for the proposed project, although the greater minimum building setbacks assumed for this alternative would be expected to result in slightly less stormwater runoff than that of the proposed project.



j. Air Quality. Construction-period air quality impacts would be similar to those described for the proposed project. Long-term air quality effects would be slightly less than those associated with the project, due to the slightly reduced traffic volumes and associated congestion under this alternative.

k. Vegetation and Wildlife. Impacts on onsite non-native trees and on foraging values of existing open space would be similar to the proposed project.

l. Cultural Resources. Like the proposed project, construction of this alternative could result in potential disturbance of previously undiscovered cultural resources.

## **D. MITIGATED MASTER PLAN**

### **1. Principal Characteristics**

This alternative would permit development of an 833,000-square-foot Master Plan similar to the proposed project, but with incorporation of onsite mitigation measures recommended in this EIR to eliminate or reduce identified impacts. Specifically, this alternative would incorporate the following EIR-identified impact mitigations:

- Preparation of design and development guidelines for the service road at the back of Walnut Creek Hospital;
- Preparation of a temporary patient protection relocation plan for Walnut Creek Hospital in the event it is partially demolished in order to extend Medical Center Way;
- Inclusion of all covered at-grade or above-ground parking spaces in the calculation for maximum FAR (at a 50 percent rate);
- Preparation of detailed design guidelines and development standards for above-ground parking structures;
- Reduction of the maximum permitted height for the Main Campus Site to six stories/89 feet;
- Reduction of the maximum permitted height for the La Casa Court site to two stories/25 feet for a flat roof and two stories/29 feet for a pitched roof;
- Installation of additional turn lanes at the Ygnacio/Marchbanks-Tampico and Ygnacio/JMMC driveway intersections, and, when constructed, at the Ygnacio/Medical Center Way intersection;
- Amendment of the Master Plan P-D ordinance to require a parking study for all development proposed under the Master Plan, without a cap on the maximum parking ratio;

- Establishment of a minimum 100-foot distance between parking driveways and intersections on Medical Center Way;
- Incorporation of bus turnouts on La Casa Via;
- Revision of the proposed crosswalk to the La Casa Via/Montego intersection;
- Revision of the proposed traffic circles to allow a minimum 42-foot turning radius;
- Along Ygnacio Valley Road and the new medical center roadway, establishment of building setbacks and building construction requirements to achieve an interior noise level of 45 dBA or less; and
- On the 230 La Casa Via Site, inclusion of requirements to retain existing oaks in the center of the site and to establish a "buffer zone" of enhanced habitat (through revegetation and tree planting) along the site's southern edge.

## **2. Comparative Impacts and Mitigating Effects**

a. Land Use. This alternative would reduce the adverse compatibility impacts between the proposed Master Plan and the continued use of Walnut Creek Hospital.

b. Urban Design and Visual Factors. This alternative would reduce the overall above-ground building mass possible under the Master Plan, thereby improving its responsiveness to the character of the neighborhood vicinity. It would also ensure that above-ground parking structures would be of a design consistent with Master Plan goals, and it would ensure that building heights permitted by the Master Plan are consistent with the city's general plan.

c. Transportation and Parking. This alternative would mitigate project impacts on parking, public transit, on-site circulation, pedestrian circulation and emergency access. It would also reduce the impacts of the project on intersection and arterial roadway levels of service, but not below the level of significance.

d. Employment and Housing. This alternative would have identical employment and housing impacts as the proposed project.

e. Public Services. Under this alternative, all identified potentially significant impacts to public services would be mitigated to less than significant levels.

f. Noise and Vibration. Onsite noise and vibration impacts would be reduced to an acceptable level under this alternative.

g. Health and Safety. Under this alternative, the increased risk of human exposure to hazardous substances would be similar to that associated with the proposed project.

h. Soils, Geology and Seismicity. Geotechnical impacts under this alternative would be similar to the proposed project.

i. Drainage and Water Quality. Impacts to drainage and water quality under this alternative would be similar to the proposed project.

j. Air Quality. The mitigated Master Plan alternative would result in less-than-significant air quality impacts similar to the proposed project.

k. Vegetation and Wildlife. This alternative would reduce impacts on vegetation and wildlife to a less than significant level.

l. Cultural Resources. This alternative would reduce all potentially significant cultural resources to a less than significant level.

## **E. ALTERNATIVE SITES**

### **1. Criteria for Feasible Alternative Sites**

An alternative site analysis is required in EIRs for consideration by local decision-makers in those cases where development on the proposed project site would result in any identified significant unavoidable adverse environmental impacts. An alternative site alternative should be considered feasible only if it is possible to meet basic project objectives at that site. As described in section III of this EIR (Project Description), applicant project objectives that pertain to site characteristics can be paraphrased as follows:

- Secure for John Muir Medical Center in a reasonable manner and for the long term, a demonstrable land use ability to expand the existing John Muir medical campus to a total, including existing facilities, of up to 1.2 million square feet, to allow John Muir to maintain in the future its preeminence as a regional and community medical center in Walnut Creek.
- Maintain for John Muir in any Master Plan approvals reasonable flexibility as to the type and location of new facilities for medical center uses in order to more effectively meet and respond to future community and regional health care needs.
- Allow John Muir to focus the Main Campus Site in the future around a new access route ("Medical Center Way") which, if other property is acquired, would eventually replace existing La Casa Via as the primary access route to the medical center and would link the Main Campus Site with the La Casa Court Site.

In addition, Section 15126(d)(5) of the CEQA Guidelines states: "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only



those alternatives necessary to permit a reasoned choice." The discussion which follows abides by this premise.

## **2. Totally New Facility at an Alternative Site or Sites**

This alternative option would involve the preparation of a Master Plan for an alternative site or sites less constrained by traffic, allowing, as in the proposed Master Plan, up to 1.2 million square feet of total medical development. Because a key project objective is *incremental expansion of the existing JMMC facility over a 20-year period*, and the JMMC has made a substantial investment in the existing site that could not be adequately recovered through sale, it would not be feasible for JMMC to meet project objectives if it were to abandon the Main Campus Site and the other three project subareas in favor of a totally new facility at an alternative location. Because it is not feasible to meet project objectives and implement this alternative, comparative environmental effects are not analyzed for this scenario.

## **3. All New Floor Area Off-Site**

This alternative assumes that the existing 365,000-square-foot hospital complex on the Main Campus Site would be retained, and the proposed 833,000 square feet of additional medical uses allowed by the proposed Master Plan would be developed at an offsite location less constrained by traffic.

Because many of the uses (especially hospital uses) in the proposed expansion would be integrally related to uses which currently exist at the Main Campus Site, and because there are no "unconstrained" traffic areas with adequate development potential within the vicinity of the Main Campus Site, it would not be possible for JMMC to adequately meet its primary expansion goals under this scenario. In addition, this alternative would appear to heavily constrain possible future expansion approaches for the facility, in contradiction of the objective to "allow reasonable flexibility as to the type and location of new medical center uses in order to more effectively meet and respond to future regional and community health care needs." Therefore, the comparative environmental effects of this scenario have not been further analyzed.

## **4. Off-site Location of Higher-Intensity Uses**

This alternative assumes that the 72,000 square feet of new medical office use proposed in the Master Plan, the highest traffic-generating component, would be constructed at an offsite in order to reduce project impacts on Ygnacio Valley Road traffic congestion. Medical office use has also been identified for possible relocation based on its greater offsite feasibility.

Working with city of Walnut Creek planning staff, the Shadelands Business Park was selected as a reasonable offsite alternative for new medical office uses. Located at the intersection of

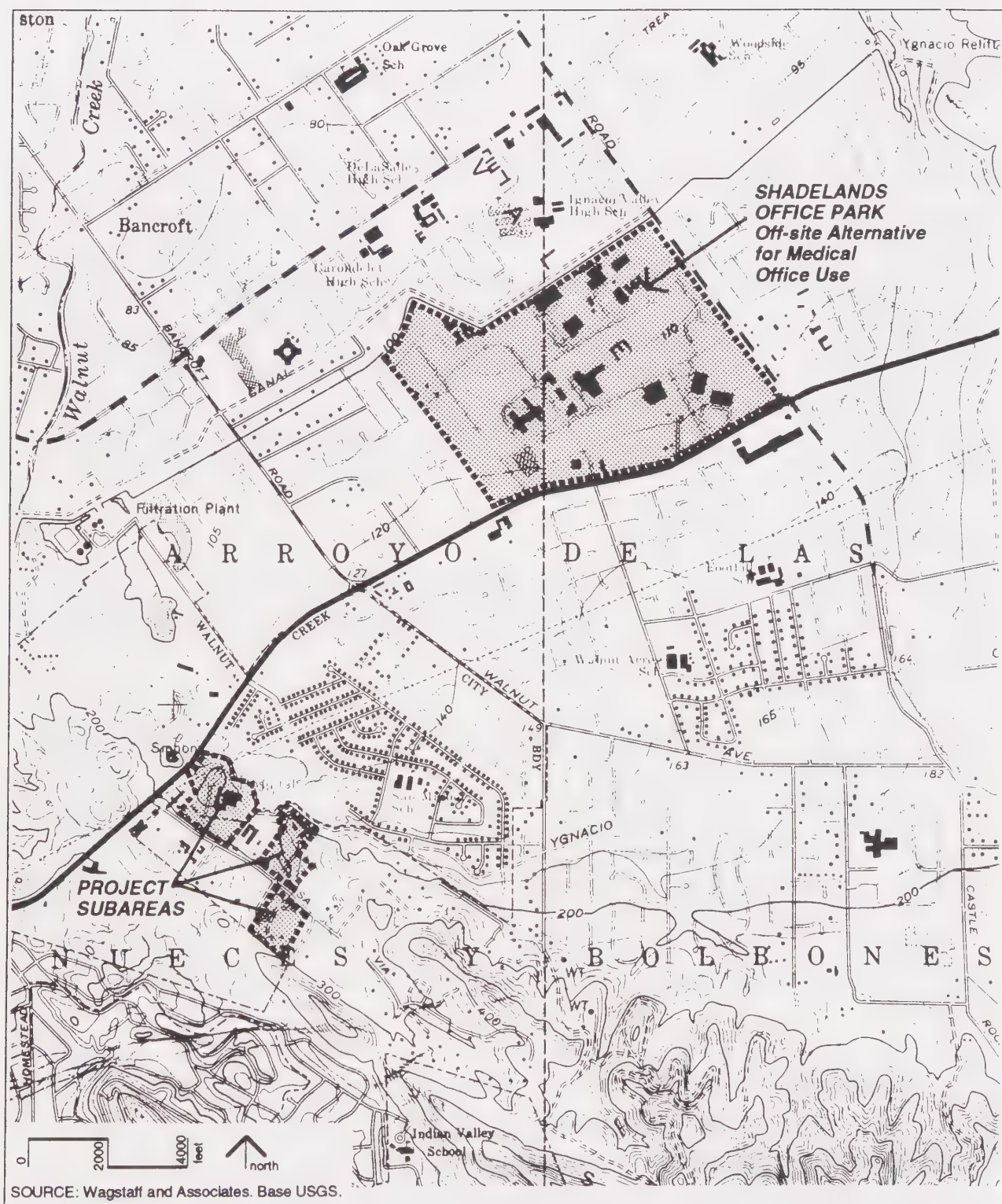


Figure 44  
**OFF-SITE  
 ALTERNATIVE MAP**



Ygnacio Valley Road and Oak Grove Road within approximately three miles of the Main Campus Site (see Figure 44), Shadelands Business Park is a 242-acre office park development with approximately 725,000 square feet of buildout potential.

Although Shadelands is also located on a highly congested segment of Ygnacio Valley Road, development of medical office at this location would absorb existing planned office floor area entitlements and would not increase the overall buildout potential in the city of Walnut Creek. This alternative would allow JMMC to revise the general plan amendment for maximum FAR at the Main Campus Site from the proposed 1.15 to 1.06 (as compared to the current general plan policy allowing a maximum 0.60 FAR).

The environmental implications of this alternative, in comparison to the proposed project, are described below:

a. Land Use. Like the proposed project, if unmitigated, this alternative would result in adverse land use compatibility impacts on the continued operation of Walnut Creek Hospital.

b. Urban Design and Visual Impacts. At the Main Campus Site, this alternative would reduce the overall above-ground building mass potential of the Master Plan, resulting in reduced visual and urban impacts.

c. Population and Housing. Under this alternative, the impacts to population and housing would be identical to that of the proposed project.

d. Transportation. As shown in Table 35, this alternative would create 194 fewer AM peak trips and 294 fewer PM peak trips within the project subareas, approximately a 23 and 35 percent reduction in AM and PM peak hour trip generation. These trips would be redistributed to Shadelands Business Park, which, as noted above, currently has approximately 725,000 square feet of buildout potential. Absorption of unbuilt general office use at Shadelands with medical office use would be expected to slightly increase the number of AM and PM peak trips from this site relative to that which would be generated by general office. Although these trips would be added to a highly congested area (the Ygnacio/Oak Grove intersection currently operates at LOS F during both AM and PM peak periods), the overall effect on traffic would be expected to be less adverse than the proposed project because the new floor area would displace unbuilt office entitlements rather than create entirely new office floor area entitlements.

With the medical office space located off-site, the adverse traffic impacts of Master Plan would be reduced, but still significant and unavoidable.

e. Public Services. The public services impacts for this alternative would be similar to that of the proposed project.



f. Noise and Vibration. The noise and vibration impacts for this alternative would be slightly reduced due to the redistribution of some construction to an off-site location with fewer sensitive noise receptors (i.e., no hospital uses).

g. Health and Safety. The health and safety impacts of this alternative would be similar to those of the proposed project.

h. Soils, Geology and Seismicity. This alternative would result in soils, geology and seismicity impacts similar to the proposed project.

i. Drainage and Water Quality. This alternative would result in drainage and water quality impacts similar to, but slightly less than, the proposed project.

j. Air Quality. This alternative would result in air quality impacts similar to, but slightly less than, the proposed project.

k. Vegetation and Wildlife. This alternative would result in vegetation and wildlife impacts similar to the proposed project.

l. Cultural Resources. This alternative would result in cultural resources impacts similar to that of the proposed project.

## **F. ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

CEQA Guidelines stipulate that, *"If the environmentally superior alternative is the no project alternative, the EIR shall identify an environmentally superior alternative among the other alternatives."* Table 36 shows a summary matrix comparing the environmental implications of the alternatives with the proposed project. Of the various alternatives evaluated in this EIR other than the no project alternative, it has been determined that the **Alternative B, the Expansion Under Current Entitlements Alternative** would result in the least adverse combination of environmental impacts and would therefore be the "environmentally superior" alternative.

Table 36

SUMMARY COMPARISON OF ALTERNATIVES WITH PROPOSED PROJECT

<i>Environmental Issue:</i>	<u>No Project</u>	<u>Expansion Under Current Entitlements</u>	<u>Reduced Expansion With Revised Envelope</u>	<u>Mitigated Master Plan</u>	<u>Alternative Site</u>
A. Land Use Impacts	Substantially reduced	Substantially reduced	Little change	Substantially reduced	Little change
B. Visual and Urban Design Factors Impacts	Slightly reduced	Slightly reduced	Slightly reduced	Substantially reduced	Little change
C. Employment and Housing Impacts	No impacts	Substantially reduced	Slightly reduced	No change	No change
D. Transportation Impacts	No impacts	Substantially reduced	Slightly reduced	Slightly reduced	Very slightly reduced
E. Public Services Impacts	No impacts	Slightly increased	Slightly reduced	Substantially reduced	Little change
F. Noise and Vibration	No impacts	Slightly reduced	Slightly reduced	Substantially mitigated	Slightly reduced
G. Health and Safety Impacts	Substantially reduced	Slightly reduced	Little change	Little change	Little change
H. Soils, Geology and Seismicity	No impact	Little change	Little change	Little change	Little change
I. Drainage and Water Quality Impacts	No impacts	Little change	Little change	Little change	Little change
J. Air Quality Impacts	No impacts	Slightly reduced	Slightly reduced	No change	No change
K. Vegetation and Wildlife Impacts	No impacts	Little change	Little change	Little change	Little change
L. Cultural Resources Impacts	Substantially reduced	Little change	Little change	Little change	Little change
M. Plan and Policy Consistency	Substantially more consistent	Substantially more consistent	Slightly more consistent	Substantially more consistent	Slightly more consistent

SOURCE: Wagstaff and Associates, 1995.





## VII. CEQA-REQUIRED ASSESSMENT CONCLUSIONS



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## VII. CEQA-REQUIRED ASSESSMENT CONCLUSIONS

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This section summarizes the EIR findings in terms of five assessment categories suggested by California Environmental Quality Act (CEQA) guidelines for EIR content: (1) growth-inducing impacts, (2) unavoidable significant adverse impacts, (3) irreversible environmental changes, (4) cumulative impacts, and (5) impacts found not to be significant.

### A. GROWTH-INDUCING IMPACTS

Section 15126(g) of the CEQA Guidelines states that an EIR should discuss "...the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." The growth-inducing impacts of the proposed JMMC master plan would consist of direct and secondary employment increases and associated increases in housing demand in the city of Walnut Creek. The proposed project would enable development of 833,000 square feet of new medical-related floor area in the city of Walnut Creek over a 20-year expansion period. This floor area increment would ultimately accommodate approximately 3,288 additional onsite employees. In addition, this direct employment growth could be expected to generate approximately 1,700 additional, offsite, secondary jobs. As discussed in section IV.D (Employment and Housing) of this EIR, this project-related, 20-year employment increase would represent approximately 41 percent of the total 1995-2015 job growth in Walnut Creek projected by the Association of Bay Area Governments (ABAG). The project-related job increase would in turn generate increased demands for new housing construction in Walnut Creek, as discussed in section IV.D (Employment and Housing).

### B. UNAVOIDABLE OR IRREVERSIBLE SIGNIFICANT ADVERSE IMPACTS

Section 15126 of the CEQA Guidelines states that "unavoidable significant adverse impacts" are those significant impacts for which no mitigation is available. Impacts identified in this EIR as significant and potentially unavoidable include the following:

#### 1. Visual and Urban Design Factors

(a) *The overall intensity of development allowed for the Main Campus Site with full buildout under the proposed Master Plan (V Impact 1).*

(b) *Loss of views from La Casa Via of Mount Diablo and the surrounding foothills (V Impact 5).*



(c) *The lack of a clear urban design relationship between the Main Campus Site and the La Casa Court Site under the Nonacquisition Option (V Impact 6).*

## **2. Traffic**

(a) *Intersection level of service impacts associated with the various increments of medical center expansion including:*

<u>Expansion Increments</u>	<u>Impacted Intersections</u>	<u>Impact Code</u>
1 through 4	Ygnacio Valley/Marchbanks-Tampico Ygnacio Valley/JMMC North Driveway	<i>T Impact 1 through 4</i>
5	Ygnacio Valley/Medical Center Way	<i>T Impact 5</i>

(b) *Arterial level of service impacts along Ygnacio Valley Road associated with full buildout under the proposed Master Plan (T Impact 6).*

(c) *Worsening of existing constrained driveway access to medical offices on La Casa Via under the Nonacquisition Option (V Impact 9).*

## **3. Statement of Overriding Considerations**

In order to approve the project as proposed, the city would be required to adopt a "Statement of Overriding Considerations" for any unavoidable impacts, in accordance with the CEQA Guidelines. Sections 15093(a) and (b) of the Guidelines state that "*if the benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered 'acceptable,'*" and that "*where the decision of a public agency allows the occurrence of significant effects which are identified in the final EIR but are not at least substantially mitigated, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record.*"

## **C. IRREVERSIBLE ENVIRONMENTAL CHANGES**

Section 2110(f) of CEQA requires that an EIR identify any significant irreversible changes that would result from implementation of the project. Section 15126(f) of the CEQA Guidelines suggests that irreversible environmental changes may involve uses of nonrenewable resources or irreversible damage resulting from environmental accidents. None of the project aspects would result in such effects. (The project would not displace any nonrenewable agricultural or extractive resources.)

#### **D. CUMULATIVE IMPACTS**

The CEQA Guidelines (section 15355) define "cumulative impacts" as *"...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."* The cumulative effects of the project and surrounding local and subregional development are discussed where applicable in the findings described in section IV of this EIR for each pertinent environmental topic area (e.g., transportation, employment and housing, public services, noise, drainage and water quality, and air quality).

#### **E. EFFECTS FOUND NOT TO BE SIGNIFICANT**

In the Initial Study for this EIR, it was determined by the city that a number of possible environmental effects of the project would be insignificant or could be adequately addressed by city staff in the development review process without further environmental assessment in this report. Those determinations are documented in Appendix A of this EIR.





## VIII. MITIGATION MONITORING



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## VIII. MITIGATION MONITORING PROGRAM

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This section describes a recommended monitoring program for implementation of the mitigation measures identified in this EIR, and describes relationships between various anticipated monitoring needs and responsible monitoring agencies.

### A. STATE MITIGATION MONITORING REQUIREMENT

On January 1, 1989, AB 3180 became law in California. The bill requires all public agencies to adopt reporting or monitoring programs when they approve projects subject to environmental impact reports.<sup>1</sup> The complete text of the bill can be found in Section 21081.6 of the Public Resources Code.

A mitigation monitoring program will be required for implementation subsequent to certification of the John Muir Medical Center Master Plan EIR. Most of the environmental mitigation measures which have been recommended in this EIR will be subject to effective monitoring through normal city development review, building permit, and associated plan check and field inspection procedures. However, to satisfy CEQA Section 21081.6, a documented record of implementation will be necessary.

### B. MONITORING CHECKLIST

A specific mitigation monitoring program should not be finalized until the EIR is certified. However, the relationship between the various impact mitigation categories in this EIR and the responsible monitoring agency, and the framework to be followed in finalizing the monitoring program subsequent to EIR certification, can be determined on a preliminary basis at this EIR stage. This preliminary information can also assist city decision-makers in evaluating the potential feasibility and effectiveness of the various recommended mitigations.

The suggested checklist shown in Table 37 includes spaces for identifying: (1) each mitigation measure included in the EIR which is ultimately required as a condition of project approval; (2) the party responsible for implementing that mitigation measure and any related requirements with respect to the timing of implementation; and (3) the party responsible for performing mitigation monitoring plus information on the type, required timing, and cost

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<sup>1</sup>Randy Pestor and Ron Bass, "Mitigation Monitoring and Reporting," California Planner, January 1989.



implications of the monitoring procedures. These Table 37 checklist categories are discussed in more detail below.

### **1. Mitigation Measures (Performance Criteria)**

This column would include each mitigation measure as it is described in the EIR Summary table (EIR section II). The description could be supplemented by any applicable performance criteria associated with each measure (i.e., any measure by which the success of the mitigation can be gauged).

### **2. Implementation Responsibility and Timing**

This column would describe the party responsible for carrying out each mitigation measure (e.g., a city department, another public agency, etc.). This column would also describe any specific implementation timing requirements, e.g., measures may need to be implemented at the completion of a particular development review or construction phase, prior to occupancy of individual development projects, or when some specific threshold (e.g., traffic volume) is reached.

### **3. Monitoring Responsibility, Type, Timing, and Cost Implications**

This column specifies which party is responsible for performing the monitoring of each mitigation. This responsibility could lie with a city department, a professional specialist hired by the city, another public agency, or some other entity.

In addition, this column would specify what type of monitoring program would be required. In some cases, established plan check and/or inspection procedures by city departments may be sufficient. In other cases, specialized monitoring procedures by hired professionals may be required.

This column would also specify any monitoring timing requirements similar to those options listed above for implementation. Some monitoring programs could involve one-time procedures while others could be required to continue for up to several years.

Finally, this column could describe the cost implications of each mitigation monitoring program element. Once the program is formulated, the cost of those monitoring steps which are appropriately included as part of the normal development review procedures of the city or Responsible Agencies may be routinely covered by the normal administrative budget of those agencies. Such costs are typically funded by existing review fees, permit fees, connection fees, impact fees, etc. For those mitigation measures which are clearly not part of these normal development review and due diligence procedures of the Responsible Agency, the city may wish to establish a monitoring fund. Fund monies could be used to cover related

Responsible Agency staff time and materials, or could be used by the city to retain qualified outside professionals to complete the monitoring.

Table 37

# MITIGATION MONITORING PROGRAM--JOHN MUIR MEDICAL CENTER MASTER PLAN

The environmental mitigation measures listed in column two below have been incorporated into the conditions of approval for John Muir Medical Center Master Plan in order to mitigate identified environmental impacts. A completed and signed chart will indicate that each mitigation requirement has been complied with, and that city and state monitoring requirements have been fulfilled with respect to Assembly Bill 3180 (Public Resources Code Section 21081.6).

IDENTIFIED IMPACT	RELATED MITIGATION MEASURE (CONDITION OF APPROVAL)	MONITORING				VERIFICATION	
		Impl. Entity <sup>1</sup>	Type of Monitoring Action <sup>2</sup>	Timing Requirements <sup>3</sup>	Monitoring and Verification Entity <sup>4</sup>	Signature	Date
<b>A. LAND USE</b>							
LU Impact 1							
LU Impact 2							
LU Impact 3							
LU Impact 4							
LU Impact 5							
<b>B. VISUAL AND URBAN DESIGN FACTORS</b>							
V Impact 1							
V Impact 2							
V Impact 3							
V Impact 4							
V Impact 5							

<sup>1</sup> Appl. = Applicant; WC = City of Walnut Creek

<sup>2</sup> CPI = Construction Period Inspection; OTC = One-time Confirmation Action; PC = Plan Check; POC = Post Occupancy Inspection; SMS = Specialized Monitoring Study; SSR = Subsequent Standard Review

<sup>3</sup> DPC = During Project Construction; PBP = Prior to Issuance of Building Permit; PGP = Prior to Issuance of Grading Permit; PPO = Prior to Project Occupancy; STR = Specialized Timing Requirement

<sup>4</sup> WCCDD = Walnut Creek Community Development Department; WCPD = Walnut Creek Police Department; CCCFPD = Contra Costa County Fire Protection District; EMS = Emergency Medical Service providers; RWQCB = Regional Water Quality Control Board



## **IX. ORGANIZATIONS AND PERSONS CONTACTED**



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## **IX. ORGANIZATIONS AND PERSONS CONTACTED**

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### **A. CITY OF WALNUT CREEK**

Dennis Bell, Lieutenant, Police Department

John Hall, Transportation Administrator, Transportation Division, Community Development Department

Sandra Meyer, AICP, Associate Planner, Planning Division, Community Development Department

Ken Nodder, Assistant Planner, Planning Division, Community Development Department

Paul Richardson, Chief of Planning, Planning Division, Community Development Department

Tim Tucker, Assistant Engineer, Engineering Division, Community Development Department

David Wallace, Senior Planner, Community Development Department

Catherine Walters, Associate Civil Engineer, Public Works Department

### **B. APPLICANT**

Mark Armstrong, Gagen, McCoy, McMahon & Armstrong

Allan Moore, Gagen, McCoy, McMahon & Armstrong

Brian O'Driscoll, Thistlethwaite Architectural Group

Richard Schulze, owner, Schulze property

Vince Scoccia, Director of Plant Services Department, John Muir Medical Center

David Thistlethwaite, Thistlethwaite Architectural Group

Carol Thompson, Supervisor, Environmental Services, John Muir Medical Center

### **C. OTHER ORGANIZATIONS**

Dave Arendt, Operations Manager, BFI--Pleasant Hill Bayshore Disposal, Inc

Dick Ballard, Property Manager, Doctor's Park

Carol Bergen, March Banks Property

Eugene Bergen, Leasing Representative, 1479 Ygnacio Valley Road

Aruna Bhat, Contra Costa County Planning Department

Ron Centerwall, TRI Commercial

David Cook, M.D., Property Manager, 130 La Casa Via

Tom Coggan, Valley Station Commander, Contra Costa County Sheriff's Department

Carter Corett, CB Commercial

Vicky DiMatteo, Director, Alameda Retirement Village

Brett Dresden, Grub & Ellis

Bill Ferguson, R & D Commercial Property



Steve Fiala, Trails Specialist, East Bay Regional Park District  
Dana Giese, New Business Representative, East Bay Municipal Utility District  
Dan Holland, Kaiser Hospital  
Steven Holtz, M.D., Property Manager, 130 La Casa Via  
Deserie Jones, Secretary to the Vice President, Pacific Rim Recycling  
Sonny Khoo, Hazardous Materials Specialist, Contra Costa County Department of  
Environmental Health  
Russell Leavitt, Planning Assistant, Central Contra Costa Sanitary District  
Art Lopez, Leasing Representative, 2161 Ygnacio Valley Boulevard  
Gary Patterson, KLP Property  
Mike Peyser, Rubicon Investments  
Jose Rios, Associate Civil Engineer, East Bay Municipal Utility District  
Rick Ryan, Fire Inspector, Contra Costa County Fire Protection District  
Bruce Scott, M.D., Property Manager, 130 La Casa Via  
Rick Steffens, TRI Commercial  
Gene Sparkman, Agricultural Biologist, Contra Costa County Department of Agriculture  
Jo Ann Story, Secretary, Mt. Diablo Paper Stock  
Virginia Voelkel, CB Commercial  
Richard Webster, former owner, 230 La Casa Via site  
S. Winnig, M.D., Property Manager, 130 La Casa Via

## APPENDICES

- A. Notice of Preparation and Initial Study
- B. Medical Office Market Considerations
- C. Supplemental Air Quality Information
- D. Supplemental Vegetation and Wildlife Information
- E. CEQA Standards for EIR Adequacy
- F. CEQA Definition of "Mitigation"
- G. EIR Authors





**APPENDIX A**  
**NOTICE OF PREPARATION AND**  
**INITIAL STUDY**



APPENDIX G

NOTICE OF PREPARATION

RE: Notice of Preparation of Draft Environmental Impact Report

(City of Walnut Creek Environmental Guidelines, Section 3.2(b); California Administrative Code '15082)

DATE: \_\_\_\_\_

PROJECT TITLE: John Muir Medical Center Master Plan

WORK ORDER NO.: \_\_\_\_\_

The City of Walnut Creek will be the lead agency and will prepare an environmental impact report for the project identified below.

To Responsible or Trustee Agencies:

Your agency has statutory responsibility for the proposed project. Therefore, please detail your views regarding the scope and content of the environmental information provided. Please identify all significant environmental issues, possible alternatives and mitigation which you will want to have explored in the EIR. Your agency will need to use the EIR when considering your permit or other approval for the project. Also, please identify whether yours is a responsible or trustee agency.

A copy of the Initial Study     X     is; \_\_\_\_\_ is not attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Send your response to Sandra Meyer, AICP, at the Walnut Creek Community Development Department, 1666 North Main Street, P.O. Box 8039, Walnut Creek, CA 94596.

Please send us the name of a contact person in your agency.

To Citizens:

The EIR will disclose the significant environmental effects of the project and suggest mitigation measures and project alternatives to reduce those impacts to an acceptable level.





## JOHN MUIR MEDICAL CENTER MASTER PLAN ENVIRONMENTAL CHECKLIST FORM

1. **Project title:** John Muir Medical Center Master Plan
2. **Lead agency name and address:** City of Walnut Creek Community Development Department  
Planning Division  
1666 North Main Street, P.O. Box 8039  
Walnut Creek, CA 94596
3. **Contact person and phone number:** Sandra Meyer, AICP (510) 943-5836
4. **Project location:** The project encompasses three noncontiguous subareas or "sites," as follows: (a) the "Main Campus Site," a 17.98-acre site located at 1601 Ygnacio Valley Road in the city of Walnut Creek; (b) the "La Casa Court Site," a 7.17-acre site encompassing 185 La Casa Via and an adjacent undeveloped parcel in the city of Walnut Creek; (c) the "230 La Casa Via Site," a 6.26-acre site located at 230 La Casa Via in unincorporated Contra Costa County; and (d) the "Schultz Property," a 2.66-acre site located to the rear of the La Casa Court Site in the city of Walnut Creek.
5. **Project Sponsor's Name and Address:** John Muir Medical Center  
1601 Ygnacio Valley Road  
Walnut Creek, CA 94598
6. **General plan designation:** *Main Campus Site:* Hospital (HO)  
*La Casa Court Site:* Single Family Low (SFL)  
*230 La Casa Via Site:* Single Family Very Low (Walnut Creek Sphere of Influence), Single Family Very Low (Contra Costa County)  
*Schultz Residence:* Single Family Low (SFL)
7. **Zoning:** *Main Campus Site:* Planned Development District (P-D 1647)  
*La Casa Court Site:* Limited Commercial (C-O) and Overlay (O-4);  
Planned Development District (P-D 1443)  
*230 La Casa Via Site:* Planned Unit Development (PUD 883017)  
(Contra Costa County)  
*Schultz Property:* Planned Development District (PD-1443)

8. **Description of project:**

**1. Required Jurisdictional Approvals**

The following jurisdictional approvals are proposed by the project:

a. General Plan Amendment. The applicant proposes a City of Walnut Creek General Plan Amendment (GPA) to redesignate a portion of the La Casa Court Site from *Single-family Low* (SFL) to *Hospital* (HO) and redesignate the 230 La Casa Via Site from *Single-family Very Low* (SFVL) to *HO*. The application also requests that the Schultz Property, which is not owned by JMMC, be redesignated from SFL to HO. The Main Campus Site is currently designated *HO* in

the city's General Plan and no change in this designation is proposed. Because the text of the general plan references Specific Plan Number Six which is proposed to be amended as noted in "b" below, a general plan text amendment is also necessary.

b. Specific Plan Amendment. The proposed project requires an amendment to Specific Plan Number Six to allow medical uses on the La Casa Court Site.

c. Rezoning/Prezoning. A new Planned Development (P-D) District is proposed for each of the JMMC-owned properties. The P-D provisions would establish development standards and set forth conditions of approval consistent with the new master plan. The unincorporated 230 La Casa Via site would be pre-zoned with a P-D designation pending annexation by the city. For the Schultz Property, the proposed P-D designation would require a future amendment if this site were developed for medical use.

d. Development Agreement. A Development Agreement between JMMC and the city is proposed which would limit the P-D standards to a 20-year term, with automatic 5-year extensions that could be terminated by either party.

e. Annexation. The applicant proposes that the unincorporated 230 La Casa Via site be annexed into the city of Walnut Creek. This would require approval by the Contra Costa County Local Agency Formation Commission (LAFCO). The applicant proposes that the annexation occur after the other approvals have been obtained from the city of Walnut Creek.

## **2. Proposed Project**

The proposed project would allow expansion of the existing 365,000 square foot John Muir Medical Center (JMMC) to a maximum total of 1,200,000 gross square feet, including up to 900,000 square feet at the Main Campus Site (an addition of up to 535,000 square feet to the existing 365,000-square-foot floor area total), up to 150,000 square feet at the 230 La Casa Court Site (an addition of up to 148,000 square feet to the existing 2,000 square-foot floor area total), and up to 150,000 square feet at the 230 La Casa Via Site.

a. Proposed Land Uses. The project proposes to allow a wide range of medical uses with no location-specific land use limitations; rather, the plan would establish a system of building intensity "envelopes" with a transition in building intensity from "lowest intensity" (2-stories) at the La Casa Court and La Casa Via sites, up to "highest intensity" (8-stories) at the core of the Main Campus Site. Within each intensity envelope category, the new Planned Development zoning would establish a range of allowable hospital and hospital-related uses (and/or criteria for establishing such uses) and associated development standards.

b. Proposed Development Standards. Development standards to be contained in the project include limitations on floor area ratio (FAR), lot coverage and building height within each subarea. At the Main Campus, the FAR would be permitted to increase from an existing 0.47 to 1.15 and structures up to 8 stories would be permitted. The La Casa Court and 230 La Casa Via sites would be permitted a maximum FAR of 0.48 and 0.55, respectively, and a maximum height of two stories.

c. Proposed Transportation Improvements and Urban Amenities. The project includes transportation/infrastructure improvements and urban design amenities that would be implemented in a sequence of interim phases or "development units" linked to the total amount of square footage constructed. These improvements/amenities include (1) the development of a main entrance court, (2) narrowing and landscaping improvements to La Casa Via south of the Main Campus Site, (3) development of a new "Medical Center Way" connecting the Main Campus Site with the La Casa Court Site, (4) development of a new service road and buffer around the east sides of the Main Campus, (5) reconfiguration of the Montego/La Casa Via intersection, (6) development of a pedestrian link between the Main Campus Site and the La Casa Via Medical Office Properties, (7) creation of landscaped buffers between the La Casa Court/230 La Casa Via sites and the La Casa Via neighborhood, and (8) development of a "neighborhood entrance gate" at the transition between the JMMC and the La Casa Via neighborhood.

d. Phasing. The project does not propose distinct specific "phases" of development; rather, the project would allow development of new floor area in any increment, provided the new construction does not exceed the relevant building volume envelope standards. However, the project application would include "development units" establishing floor area



square footage thresholds at which various improvements would be required. On the Main Campus Site, five "development units" are proposed. On each of the other sites, development of any useable square footage would trigger additional specific amenity requirements for those properties.

**9. Surrounding land uses and setting:**

The project is located in the city of Walnut Creek and in unincorporated Contra Costa County. Regional access to the JMMC is provided via Ygnacio Valley Road, a principal subregional arterial which extends west from the project site to Interstate 680 (I-680). State Highway 24 (SR 24) intersects I-680 immediately south of the Ygnacio Valley Road interchange. Ygnacio Valley Road also provides access to the project site from the city of Concord. The Main Campus is located on the northeastern side of La Casa Via near the intersection with Ygnacio Valley Road. The La Casa Court and 230 La Casa Via sites are located on either side of La Casa Via to the southeast of the Main Campus near the boundary of the La Casa Via residential neighborhood.

The three project subareas would be located along a segment of La Casa Via already containing existing medical office uses, a psychiatric hospital (Walnut Creek Hospital), a senior housing facility, a congregate care facility, and a church. These La Casa Via land uses are bounded on the northeast by the Ygnacio Canal and are surrounded by single family residential neighborhoods.

**10. Other public agencies whose approval is required: (e.g., permits, financing approval, or other participation agreement.)**

Approval by the Contra Costa County Local Agency Formation Commission (LAFCO) is required for the proposed annexation of the 230 La Casa Via site to the city. A Master Tax Agreement is currently in place between the city of Walnut Creek and Contra Costa County. If this agreement is not sufficient to cover the tax exchange necessary for the proposed annexation, approval of a new tax agreement would be required from the county. A proposed realignment of the Briones-Mt. Diablo pedestrian/equestrian trail would require review by the East Bay Regional Parks District (EBRPD). The hospital expansion plan would also be subject to review by the State of California's Joint Commission on Accreditation of Hospitals. Any hospital building construction would require review by the State of California's Office of Statewide Health Planning and Development, the Office of the State Architect, and the State Fire Marshal to ensure compliance with related state standards. Future building modifications would also be subject to inspection by the State Department of Health, Division of Licensing and Certification, which issues and maintains the hospital's license to operate.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |  |  |   |
|--|--|---|
| <input checked="" type="checkbox"/> Land Use and Planning  | <input checked="" type="checkbox"/> Transportation/Circulation         | <input checked="" type="checkbox"/> Public Services             |
| <input checked="" type="checkbox"/> Population and Housing | <input checked="" type="checkbox"/> Biological Resources               | <input checked="" type="checkbox"/> Utilities & Service Systems |
| <input checked="" type="checkbox"/> Geological Problems    | <input type="checkbox"/> Energy & Mineral Resources                    | <input checked="" type="checkbox"/> Aesthetics                  |
| <input checked="" type="checkbox"/> Water                  | <input checked="" type="checkbox"/> Hazards                            | <input checked="" type="checkbox"/> Cultural Resources          |
| <input checked="" type="checkbox"/> Air Quality            | <input checked="" type="checkbox"/> Noise                              | <input checked="" type="checkbox"/> Recreation                  |
|  | <input checked="" type="checkbox"/> Mandatory Findings of Significance |   |

**DETERMINATION: (To be completed by the Lead Agency)**

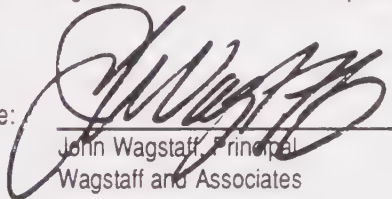
On the basis of this initial evaluation:

- ☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A **NEGATIVE DECLARATION** will be prepared.
- ☒ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- ☐ I find that the proposed project **MAY** have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project.

Prepared by:

Signature:

  
John Wagstaff, Principal  
Wagstaff and Associates

Date:

11/3/95

Reviewed by:

Signature:

\_\_\_\_\_  
Paul Richardson, Chief of Planning  
City of Walnut Creek

Date:

\_\_\_\_\_

## ENVIRONMENTAL IMPACTS:

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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### I. LAND USE PLANNING. *Would the proposal:*

- a. Conflict with general plan designation or zoning?



The project proposes to allow medical uses at the La Casa Court and the 230 La Casa Via sites, which are now respectively designated *Single-family Low* (SFL) and *Single-family Very Low* (SFVL) in the City of Walnut Creek General Plan. The proposed medical uses would be inconsistent with these residential designations. The project includes a general plan amendment to re-designate these properties to *Hospital (HO)*, which would allow the proposed medical uses.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
b. Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The only environmental plan or policy adopted by the city of Walnut Creek is the <u>Growth Limitation Subelement</u> of the <u>City of Walnut Creek 1989 General Plan</u> . Hospitals are specifically exempted from the policies contained in this subelement.				
c. Be incompatible with existing land use in the vicinity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project has the potential to be incompatible with the residential neighborhoods in the project vicinity.				
d. Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible land uses)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No agricultural uses are located within the project subareas or in the immediate project vicinity. Therefore, the project is not expected to have an impact on agricultural resources or operations.				
e. Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project is located along either side of La Casa Via, the sole vehicular access road to the La Casa Via Neighborhood to the east of the project. The project has the potential to result in a physical barrier between this neighborhood and the broader Walnut Creek community.				

## II. POPULATION AND HOUSING. *Would the proposal:*

a. Cumulatively exceed official regional or local population projections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Although the project does not have a residential component and therefore would not be expected to increase regional or local population projections, it would result in a significant potential for increased employment and could therefore affect regional or local jobs/housing ratio projections.				
b. Induce substantial growth in an area directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project would allow up to 833,000 square feet of additional medical and ancillary floor area to be constructed over a 20-year period. This new development would have the potential to directly induce the growth of supporting medical or ancillary development either in the immediate vicinity, in other appropriately-zoned areas of Walnut Creek, or elsewhere in the central Contra Costa County region.				



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
c. Displace existing housing, especially affordable housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No housing exists on within the three project subareas. Therefore, the project will not displace existing housing.				
<b>III. GEOLOGIC PROBLEMS.</b> Would the proposal result in or expose people to potential impacts involving:				
a. Fault rupture?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Available evidence indicates that the hospital property is not located on the trace of any known fault. Due to the relatively great distance from known active faults (see III.b below), there appears to be no significant potential for surface fault rupture at any of the project subareas. <sup>1</sup>				
b. Seismic ground shaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project is located approximately 2.2 miles to the west of the active Concord Fault System and 32 miles east of the San Andreas Fault System. It is therefore subject to seismic ground shaking during a seismic event, although it is not in an Alquist-Priolo Fault Zone.				
c. Seismic ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The project area is characterized by low topographic relief, gentle slopes, shallow bedrock depth, and very stiff clayey soils which have a low potential for secondary effects associated with moderate to strong earthquakes such as landslides, lurching, liquefaction, differential compaction, or settlement. <sup>2</sup> Therefore, it is not expected that any of the project subareas would be subject to seismic ground failure in a seismic event.				
d. Seiche, tsunami, or volcanic hazard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The project is not located near a major body of water capable of seiche or tsunami, nor near any active volcanoes.				
e. Landslides or mudflows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Due to the geologic features mentioned in subsection III.c above, it is not expected that any of the project subareas would be subject to landslides or mudflows. The project is not located in general plan-identified slide area.				

<sup>1</sup> City of Walnut Creek, John Muir Memorial Hospital Phase III Expansion Final Environmental Impact Report, February 1986, p. 40.

<sup>2</sup> Ibid., p. 40.

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
f. Erosion, changes in topography or unstable soil conditions from excavation, grading, clearing, grubbing or fill?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The project subareas are not located in areas of significant slope and therefore development of the project would not result in any significant changes to topography, erosion patterns, or the existing stable soil conditions.				
g. Any potential for water erosion, based on slopes, soil types and soil stability?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There may be a significant construction period potential for water erosion generated by the project grading. (Also, see IV.e below.)				
h. Subsidence of land?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The sandstone and siltstone bedrock found in the project area should provide good foundation support for structures, with negligible settlement. However, if project structures do not penetrate to bedrock or are not tied to bedrock with properly engineered footings, the potential for subsidence exists.				
i. Expansive soils?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
According to the United States Soils Conservation Service, the soils in the project area are Alo clay and Lodo clay loam which are not expansive soils.				
j. Unique geologic or physical features?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
There are no unique geologic features located within the three project subareas that would be impacted by the project.				

#### IV. WATER. *Would the proposal result in:*

a. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Two of the project subareas (the La Casa Court and 230 La Casa Via sites) are primarily undeveloped. The project has the potential to significantly change the absorption rates, drainage patterns, and the rate and amount of surface runoff from these properties.				
b. Exposure of people or property to water related hazards such as flooding?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No part of the project is in a 100-year flood zone.				
c. Discharge into surface waters or other alteration of surface water quality (e.g., temperature, dissolved oxygen or turbidity)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The only surface water feature in the project vicinity is the Ygnacio Canal. The project would be designed to drain into a municipal storm drainage system. However, the potential exists for discharge of stormwater into the canal.				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
d. Disruptions to the drainage pattern of the site during or after construction (i.e., increase in impervious area, removal of vegetation, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project has the potential to disrupt drainage patterns at any of the project subareas during project construction. (Also see subsection IV.a above.)				
e. Discharge of urban runoff pollutants from residential, commercial or industrial activity (e.g., sediment from construction, hydrocarbons and metals from vehicle use, nutrients and pesticides from landscape maintenance, metals and acidity from mining operations)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project has the potential to significantly increase urban runoff pollutants from the primarily undeveloped La Casa Court and 230 La Casa Via sites.				
f. Changes in the amount of surface water in any water body or wetland?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
See IV.c above and IV.k below.				
g. Changes in currents, or the course or direction of water movements, in either marine or fresh water or wetlands?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Same as for IV.c above.				
h. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project is located within the Ygnacio Valley, identified in the <u>Walnut Creek General Plan</u> as one of 18 significant ground water areas in the San Francisco Bay region. The scale of the project would not be expected to significantly impact the recharge of this aquifer. However, the presence of subsurface springs in the project vicinity has the potential to cause foundation problems for structures allowed by the project, particularly if subterranean structures are developed.				
i. Altered direction or rate of flow of groundwater?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project has the potential to alter the direction of groundwater flow if subterranean structures are constructed below the aquifer level. (See IV.h.)				
j. Impacts to groundwater quality through infiltration of reclaimed water or stormwater runoff that has contacted pollutants from urban, industrial or agricultural activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The project would not utilize reclaimed water and would not involve agricultural or industrial activities. Project stormwater drainage would primarily be channeled into an urban drainage system.				
k. Alterations of wetlands in any way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
No wetlands exist on the project subareas or in the project vicinity.				



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<p>I. Substantial reduction in the amount of groundwater otherwise available for public water supplies?</p> <p>Groundwater is not an important source of public water supplies in Walnut Creek. Domestic water is supplied by the East Bay Municipal Utilities District and the Contra Costa Water District from surface water supplies (primarily the Mokelumne River and the Delta). Therefore, the project would not be expected to result in a substantial reduction of groundwater otherwise available for public water supplies.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>V. AIR QUALITY. <i>Would the proposal:</i></b></p>				
<p>a. Violate any air quality standard or contribute to an existing or projected air quality violation?</p> <p>The closest Bay Area Air Quality Management District (BAAQMD) air quality monitoring site is located north of the project site in the city of Concord. The federal ambient air quality standard for ozone is frequently exceeded at this monitoring station. The project has the potential to contribute to this problem.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>b. Expose sensitive receptors to pollutants?</p> <p>Project-related construction activities have the potential to expose existing JMMC uses to temporary construction pollutants (dust, exhaust, etc.), and the project is located in close proximity to residential uses and outpatient medical services at the La Casa Via Medical Office properties.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>c. Alter air movement, moisture, or temperature, or cause any change in climate?</p> <p>The scale and nature of the project would prevent it from having any influence on local or regional air movement, moisture, temperature, or climate.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>d. Create objectionable odors?</p> <p>The construction of medical uses does not typically involve the creation of significant construction period or permanent odors. However, the project is located over subterranean sulphur springs which emit a strong odor. This odor could temporarily intensify during construction of the project.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p><b>VI. TRANSPORTATION/CIRCULATION. <i>Would the proposal result in:</i></b></p>				
<p>a. Increased vehicle trips or traffic congestion?</p> <p>The project-facilitated construction of up to 833,000 square feet of new medical and ancillary uses represents a significant potential for increased vehicle trips and traffic congestion.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<p>b. Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</p> <p>The project would allow the reconfiguration of the La Casa Via/Ygnacio Valley Road intersection, including the closing of La Casa Via at this point and the construction of a new road (Medical Center Way). This proposed intersection configuration represents a potential safety concern.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>c. Inadequate emergency access or access to nearby uses?</p> <p>By allowing La Casa Via to be closed at the Ygnacio Valley Road intersection and diverting the La Casa Via neighborhood traffic onto Montego Road, the project has the potential to create inadequate emergency access to the La Casa Via neighborhood.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>d. Insufficient parking capacity onsite or offsite?</p> <p>The large scale of the project and the current scarcity of on-street parking in the project area create the potential for insufficient parking capacity both onsite and offsite.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>e. Hazards or barriers for pedestrians or bicyclists?</p> <p>The project would allow the development of three noncontiguous properties. Depending on the internal circulation plan, the project may include hazards to pedestrian flow (such as the pedestrian connection between the 230 La Casa Via Site and the other project subareas, which would cross La Casa Via road) or barriers to pedestrian flow. Project-generated traffic could potentially create hazards for bicyclists on Ygnacio Valley Road, which contains a Class One bikeway, or for pedestrian and equestrian users of the Briones-Mt. Diablo trail, which traverses the La Casa Court Site.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>f. Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?</p> <p>The project has the potential to be inconsistent with general plan policies relating to public transit amenities, such as Program 2.3 to "preserve options for future transit use when designing new or modified roadways." The adequacy of project bicycle provisions also warrants evaluation.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>g. Rail, waterborne or air traffic impacts?</p> <p>The project may ultimately result in a change in the location, volume, and/or approach pattern of medivac helicopter traffic to and from the JMMC. With the exception of the Ygnacio Canal, there are no other local water, rail, or air traffic systems in the immediate vicinity of the project site that would be directly affected by the project. The Ygnacio Canal is not a water system which supports transportation services.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
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**VII. BIOLOGICAL RESOURCES.** *Would the proposal result in impacts to:*

- |   |                                     |                          |                          |                          |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|

The Main Campus Site does not contain a remaining natural habitat. However, the remaining project subareas are primarily in a "disturbed natural state" and may contain a sensitive habitat area or be a part of a wildlife migration route. Therefore, the project could result in significant impacts to endangered, threatened or rare species or their habitats if these species or habitats are identified.

- |   |                                     |                          |                          |                          |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|
| b. Locally designated species (e.g., heritage trees)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|

Mature trees are found within the project subareas (especially on the La Casa Via Site). Depending on their characteristics and the quantity and quality of replacement trees proposed, removal of these trees may be inconsistent with the city's tree preservation ordinance.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c. Locally designated natural communities (e.g., oak forest, coastal habitat, etc.)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

None of the project subareas are located within a locally-designated natural community.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d. Wetland habitat (e.g., marsh, riparian, and vernal pool)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

Same as IV.k above.

- |   |                                     |                          |                          |                          |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|
| e. Wildlife dispersal or migration corridors? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|

Same as VII.a above.

**VIII. ENERGY AND MINERAL RESOURCES.** *Would the proposal:*

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Conflict with adopted energy conservation plans? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

The project would be required to comply with any adopted energy conservation plans.

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| b. Use nonrenewable resources in a wasteful and inefficient manner? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

The project would not increase the rate of use of nonrenewable resources more than any other conventional medical use in the city.

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c. Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

No valuable mineral resources are known to be located within the project subareas.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
<b>IX. HAZARDS. Would the proposal involve:</b>				
a. A risk of accidental explosion or release of hazardous substances (including, but not limited to, oil pesticides, chemicals, or radiation)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project could increase the risks associated with the disposal of hazardous medical waste.				
b. Possible interference with an emergency response plan or emergency evacuation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
John Muir Medical Center is a county-designated trauma center. The project construction period could temporarily interfere with the use of the medical center to treat trauma victims during a region-wide emergency.				
c. The creation of any health hazard or potential health hazard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Same as IX.a above.				
d. Exposure of people to existing sources of potential health hazards?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disposal of medical waste occurs at the existing JMMC facility. The project expansions may increase the exposure of people to the hazards related to this existing source of potential health hazards.				
e. Increased fire hazard in areas with flammable brush, grass, or trees?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The project subareas are primarily surrounded by existing residential and commercial development and would therefore be expected to have no significant on the level of fire hazard in the area.				
<b>X. NOISE. Would the proposal result in:</b>				
a. Increases in existing noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Project construction and increased use of the project heliport could result in significant increases in existing noise levels. Sensitive noise receptors include the surrounding residential neighborhoods and the existing on- and off-site medical uses.				
b. Exposure of people to severe noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Same as X.a above. Also, Ygnacio Valley Road traffic noise has the potential to significantly affect future changes in use of the Main Campus site.				
<b>XI. PUBLIC SERVICES. Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:</b>				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
a. Fire protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The large scale and nature of the project could result in a significant impact on fire protection services.				
b. Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The large scale and nature of the project could result in a significant impact on police services.				
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The project does not have a residential component and therefore would not be expected to significantly affect public school services or significantly impact public school attendance.				
d. Maintenance of public facilities, including roads or storm drain facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project has the potential to significantly increase the volume of traffic on local roadways and the amount of runoff into the local storm drainage system and therefore may significantly impact local roadway and local storm drain facilities maintenance needs. (See IV.a and VI.a above.)				
e. Other government services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
The project does not have the potential to significantly impact other government services.				

**XII. UTILITIES AND SERVICE SYSTEMS.** *Would the proposal result in a need for new systems or supplies, or substantial alterations to the following utilities:*

a. Power or natural gas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Although the project would increase energy use, it would not result in an unusual or substantial amount of energy use, significantly increase the demand on existing sources of energy, or require the development of new sources of energy.				
b. Communications systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Although the project would result in increased use of communication systems, it would not significantly increase the demand on existing communication systems.				
c. Local or regional water treatment or distribution facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project has the potential to significantly increase the demand for water in Walnut Creek.				

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
d. Sewer or septic tanks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project has the potential to significantly increase the demand for sewage collection and treatment in Walnut Creek.				
e. Stormwater drainage or stormwater quality control?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Same as for XI.d.				
f. Solid waste disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project has the potential to significantly increase the demand for solid waste disposal in Walnut Creek.				
g. Local or regional water supplies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Same as for XII.c.				

### XIII. AESTHETICS. *Would the proposal:*

a. Affect a scenic vista or scenic highway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The project has the potential to significantly affect views of Mount Diablo from the project vicinity. Mount Diablo is a California State Park located east of the city of Walnut Creek and is prominently visible from points throughout the city, including the project vicinity.				
b. Have a demonstrable negative aesthetic effect?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
By allowing a significant increase in building mass, the project has the potential to result in a demonstrable negative aesthetic effect on the project vicinity, including surrounding residential neighborhoods. Portions of the project subareas are visible from residential neighborhoods to the north, east, and south, from Ygnacio Valley Road, and from existing medical and institutional uses in the project vicinity.				
c. Create light or glare?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Although the project is not expected to have more intensive lighting than typical health care facilities, the project's close proximity to residential uses could result in significant light and glare impacts.				

### XIV. CULTURAL RESOURCES. *Would the proposal:*

a. Disturb paleontological resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
There are no known paleontological resources within any of the project subareas.				



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
b. Disturb archaeological resources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>The <u>1986 John Muir Memorial Hospital Phase III Expansion EIR</u> identified a recorded prehistoric site in the immediate vicinity of the Main Campus Site. The project has the potential to disturb archeological resources if they exist within any of the three project subareas.</p>				
c. Have the potential to cause a physical change which would affect unique ethnic cultural values?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Same as for XIV.b above.				
d. Restrict existing religious or sacred uses within the potential impact area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
There are no known existing religious or sacred uses associated with any of the project subareas.				

#### XV. RECREATION. *Would the proposal:*

a. Increase the demand for neighborhood or regional parks or other recreational facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The project includes no residential component and would therefore not be expected to significantly increase the demand for neighborhood or regional parks or other recreational facilities.				
b. Affect existing recreational opportunities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Briones/Mount Diablo Trail, a regional equestrian and pedestrian trail, follows the northwestern perimeter of the 230 La Casa Via site and, in connecting with a trail on the Ygnacio Canal, crosses La Casa Via and the La Casa Court Site. The project could impact the use of this trail.				

#### XVI. MANDATORY FINDINGS OF SIGNIFICANCE

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other projects, and the effects of probable future projects)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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## APPENDIX B. MEDICAL OFFICE MARKET CONSIDERATIONS

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The proposed John Muir Medical Center Master Plan includes possible accommodation of substantial onsite medical office floor space. This project aspect has raised concerns regarding the market impacts of the Master Plan on existing nearby medical office development at the La Casa Via (i.e., "Shell Ridge") medical office properties.

Section 15131(a) of the CEQA Guidelines states: "[e]conomic or social effects of a project shall not be treated as significant effects on the environment." However, CEQA Section 15131(c) allows the Lead Agency (i.e., the city) to present economic or social information on a project in whatever form the agency desires to allow such factors to be considered in reaching a decision on a project. The medical office market considerations presented in this Appendix represent non-environmental issues which have been evaluated to determine the potential long-term impacts of the proposed Master Plan on other existing and planned medical office development in the city and in the immediate vicinity of the project.

### 1. SETTING

The La Casa Via Medical Office Properties shown on EIR Figure 2 (Project Site and Vicinity) and Figure 12 (Project Vicinity Land Use) are referred to in this appendix as the "Shell Ridge area." This area is generally bounded by JMMC and La Casa Via on the northeast, Ygnacio Valley Road on the northwest, Montego Road on the southeast, and Tampico Road on the southwest. One additional building on the southwest side of the Tampico/Ygnacio Valley Road intersection is also considered in the local study area.

#### a. Shell Ridge Area Medical Office Inventory

(1) General Characteristics. The Shell Ridge area contains a total of 11 medical office complexes with a total of approximately 234,000 square feet of gross floor area, including (a) seven medical office complexes located on La Casa Via, (b) three medical office complexes on Ygnacio Valley Road, and (c) one medical office complex on Montego Road. JMMC owns two of these medical office properties, including the 21,158-square-foot building at 1455 Montego Road, and a 6,000-square-foot building at 240 La Casa Via. The San Marco Office Building at 1399 Ygnacio Valley Road, a 38,000-square-foot building of which approximately 50 percent is medical office, is the only building in the Shell Ridge area which is not exclusively medical. Table B-1 lists each of the office buildings included in the Shell Ridge area.



	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less than Significant Impact	No Impact
d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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As indicated in Table B-1, the existing Shell Ridge area medical office buildings were constructed as early as approximately 35 years ago (1960), and as late as two years ago (1993). Individual buildings range in size from 6,000 to 36,000 square feet and from one to three stories. A windshield survey of the office properties in the area indicates that the buildings and landscaping in the area are generally well kept and of reasonably good quality.

(2) Tenant Profile. Selected existing office tenants in the area are listed in Table B-1. With the exception of the San Marco Office Building, each of the Shell Ridge area buildings caters almost exclusively to medical-related users, and most of these are affiliated with JMMC. According to leasing representatives, a number of the buildings are owned and occupied by physician groups with by-laws requiring that tenants be affiliated with JMMC. In addition to the off-campus buildings that JMMC owns, JMMC also rents 3,000 square feet at the San Marco Office Building (1399 Ygnacio Valley Road). Most tenants here occupy suites ranging in size from 1,000 to 3,000 square feet, with 1,500 square feet as the approximate average.

The use of a portion of the San Marco Building by non-medical users can partly be explained by the fact that the upper floor of this two-story building lacks elevators, which is considered a requirement for multistory medical office buildings, and the building has spaces which are not configured for medical office use.

(3) Existing Vacancy Rates. Vacancy rates for buildings within the Shell Ridge area are relatively low, ranging from zero to 10.7 percent. Overall, the current vacancy rate for the Shell Ridge area (including 2,250 vacant square feet in the San Marco Office Building) is approximately 6.0 percent. However, leasing representatives contacted for this study indicate that newly vacated spaces have been difficult to fill, with several currently-vacant spaces empty for over one year. Leasing agents attribute this sluggishness to changes in the health industry which have resulted in the consolidation of independent medical practices into larger medical groups which seek to achieve economies of scale by sharing space and administrative functions. In addition, leasing agents believe that many physicians who might otherwise be interested in securing new space are reluctant to make long-term lease commitments due to the uncertain future of the health care industry.

The current difficulty in leasing vacant spaces is a relatively new phenomenon in the Shell Ridge area. Whereas vacancies were commonplace in other parts of Walnut Creek throughout the late 1980s and early 1990s, the Shell Ridge area managed to maintain comparatively high occupancy rates, due to steady demand from medical uses related to JMMC. Although there has always been some turnover of tenants, vacancies historically filled up quickly. Leasing agents state that some of the current vacancies are in buildings that had been fully occupied since their initial lease-up.

(4) Rents. In the nearby office buildings targeted strictly to medical officer users, rents currently range from \$1.75 to \$2.20 per square foot, full service. Older buildings that have not been updated tend to command rents at the lower end of the range. Rents in the San Marco Office Building are



Table B-1

SELECTED VICINITY MEDICAL OFFICE SPACE CURRENTLY LEASING

<u>Project/Location</u>	<u>Year Built</u>	<u>Total Sq.Ft.</u>	<u>Vacant Sq.Ft.</u>	<u>Vacancy (in %)</u>	<u>Lease Rates/ Sq.Ft.</u>	<u>Type of Space</u>	<u>Selected Tenants</u>	<u>Competition</u>	<u>Comments</u>
East Bay Medical Complex 1515 Ygnacio Valley Road	1964	16,000	1,000	6.3%	\$2.07 incl H <sub>2</sub> O, heating, AC, no janitorial or electricity	Medical	Patient Data Mgt; John Muir Health Mgt; E. Bay Medical Imaging; John Muir Outpatient Lab; indep. offices	All buildings in immed. area	Vacant space has been available for one year. This is the first vacancy the building has ever experienced, and there has been little interested expressed in the space. Typical suite sizes range from 450 to 3,000 square feet with the average space averaging 1,500 square feet. All doctors are affiliated with the JMMC.
Casa Muir Professional Center 1479 Ygnacio Valley Rd	1960	19,980	1,900	9.5%	\$1.75 plus expenses	Medical	Guardian Ygnacio; Immuno Diagnostic Services; Meris Labs; Acupuncture/ Acupressure Pain Control Clinic; indep. offices	112 LCV	Class B or C building. Some spaces have remained vacant for up to one year. Competitive advantages include proximity to hospital and other medical businesses. Main disadvantage is age of building. Typical tenant size is 400 to 2,000 square feet. One tenant was lost to 112 LCV because they were offered substantial buildout allowances.
106 La Casa Via 108 La Casa Via 110 La Casa Via 112 La Casa Via	1984- 1993	85,629	3,074	3.6%	\$2.20 Full Service	Medical	Children's Hospital Oakland; Pediatric Surgery Assoc.; Contra Costa Nephrology; Phys. Therapy Assoc.; Pathology Lab; Cancer Care; indep. specialists; Dental Offices	Bldg. on LCV and within one mile proximity	Low vacancy rates are attributed to close proximity to JMMC. Other competitive advantages include state of the art facilities, central AC and covered parking. Rents are higher than nearby competitors within 1-3 miles from complex. Vacant spaces available for one year. Adjacent lot is vacant and could ont sell when marketed 2 years ago. Ninety-five percent of tenants are affiliated with JMMC. Building can accommodate industry trend of utilizing larger office spaces. Expansion at JMMC would be hard to compete with if they offered free rent or large allowances.

<u>Project/Location</u>	<u>Year Built</u>	<u>Total Sq.Ft.</u>	<u>Vacant Sq.Ft.</u>	<u>Vacancy (in %)</u>	<u>Lease Rates/ Sq.Ft</u>	<u>Type of Space</u>	<u>Selected Tenants</u>	<u>Competition</u>	<u>Comments</u>
120 La Casa Via 122 La Casa Via	NA	34,803	3,731	10.7%	\$2.00 net of utilities and janitorial	Medical	Diablo Valley Radiology Medical Group, Inc.; Bay Area Retina Assoc., U.S. Ortho.; Muir Orthopedic Medical Group; Diablo Dialysis; Christiansen Physical Therapy, indep. specialists	Other Shell Ridge complexes	All independent physicians (as opposed to specialty offices such as the radiology lab) are affiliated with JMMC; approximately 80 percent of all tenants are independent physicians. Of the four vacancies, two have been available for the past three months and two have ben available for over one year. Tenants have been lost to both San Miguel and Doctors Park (medical offices in other areas in Walnut Creek), but this is rare and occurs only when the tenant wants to be further away from the hospital. Otherwise, proximity to JMMC is considered to be the main selling point of the subject property. Competitive disadvantages are considered to be traffic concerns on Ygnacio Valley Rd. These buildings are designed for physicians and allied health professionals and are not deemed suitable for general office use

<u>Project/Location</u>	<u>Year Built</u>	<u>Total Sq.Ft</u>	<u>Vacant Sq.Ft</u>	<u>Vacancy (in %)</u>	<u>Lease Rates/ Sq.Ft.</u>	<u>Type of Space</u>	<u>Selected Tenants</u>	<u>Competition</u>	<u>Comments</u>
Muir Medical Park 130 La Casa Via	total	31,472 <sup>1</sup>					Medical Officers of: Vascular Surgery, Orthopedic Surgery,	Other Shell Ridge complexes	The three buildings that make up 130 LCV are divided into four independent managing entities that are generally owned by the doctors that occupy the space. However, some doctors in the original partnership have either retired or moved to a different facility and lease their space to other doctors. As part of the buildings by laws, all tenants must be affiliated with JMMC. Vacancies are non-existent to rare with some building never having experienced a vacancy. In January 1996 Building 3 will have one 1,000 square foot space available for sublease. Competitive advantages include proximity to hospital, quality of construction, excellent maintenance and landscaping. Disadvantages include lack of elevators (through ramps are available), and the heavily-trafficked Ygnacio Valley Blvd. Competition in the immediate vicinity is minimal because the nature of owner occupancy makes it less susceptible to high turnover. Patients that are tied to certain HMOs must travel from as far as Berkeley because they are required to use certain doctors. Other patients come from as far as Fairfield and Antioch where there are fewer specialists. Buildings are primarily suited to medical office use; major rehabilitation would be necessary to accommodate any other type of use. Office sizes range from 650 to 3,000 square feet. Long term leases would protect these buildings in the short term from JMMC expansion into medical offices, but any vacancies would force a lowering of rental rates and potential long term vacancies.
Building 1	1974	12,000	0	0.0%	\$1.80 gross	Medical	Internal Medicine,		
Building 2	1977	6,400	0	0.0%	\$2.00 NNN	Medical	Vascular Surgery,		
Building 2	1980	6,000	0	0.0%	\$1.70 NNN	Medical	Podiatry, Plastic Surgery, Psychiatry,		
Building 3	1976	6,000	0	0.0%	\$1.80 full service	Medical	Pediatric Ophthalmology, Pediatric Hematology Oncology, Dental Offices		



<u>Project/Location</u>	<u>Year Built</u>	<u>Total Sq.Ft.</u>	<u>Vacant Sq.Ft.</u>	<u>Vacancy (in %)</u>	<u>Lease Rates/ Sq.Ft.</u>	<u>Type of Space</u>	<u>Selected Tenants</u>	<u>Competition</u>	<u>Comments</u>
San Marco Office Building 1399 Ygnacio Valley Road	1963	36,168	2,250	6.2%	\$1.00 NNN	50-50: Medical/ General	Behavioral Counseling; Family Counseling; John Muir Foundation; Montross Barber Investments Inc.; Southmark Financial Services; Exam Management-Insurance	None in immediate area	Competitive advantages include good parking and location that is both close to downtown and JMMC. JMMC represents the largest tenant with 3,000 square feet. Most tenants range between 1,000 and 2,000 square feet. Second floor space is not suitable for medical offices since there is no elevator, though second floor space is limited. Typical general office tenants are small companies or branch offices. Medical offices are labels, psychiatrists, and chiropractors
<b>JMMC-Owned Medical Office Buildings in the Shell Ridge area</b>									
Muir-Montego Professional Cntr 1455 Montego	1980	22,360	2,000	8.9%	\$1.80 NNN	Medical	Diablo Neurosurgical Medical Group Inc.; Bay Area Prenatal Consultants, Medical Offices	All medical office in space in WC, not in other regions	Two 2,000 square-foot spaces have been vacant for at least six months. If JMMC were to expand, this building could be affected based on the amenities and rent that would be offered with the new facility.
Muir Wound Care Center 240 La Casa Via	1993	6,000	0	0.0%	NA	Medical	NA	NA	NA
<b>Selected Buildings in Other Walnut Creek Medical Office Nodes</b>									
1776 Ygnacio Valley Rd	1965	30,000	5,000	16.7%	Medical Office \$1.90 Full svc; General Office \$1.35 Full svc	55-45%: Medical/ General	See comments	Shell Ridge Doctors Park	Typical tenant size is 1,500 square feet. The largest contiguous space available is 3,000 square feet. One space has been available for several years and the other remaining space has been vacant for at least one year. None of the second floor units are for medical uses since there is no elevator. Amenities include neighboring park.
Doctors Park 2021-2121 Ygnacio Valley Rd	1975	54,000	8,100	15.0%	\$1.85 Full Service	Medical	See comments	LCV; San Miguel	This medical office complex consists of nine buildings and services all within the allied health profession. For the first 20 years there were no vacancies but the past couple of years have witnessed a large turnaround. Almost all the physicians in this facility are affiliated with JMMC, but there are more dentists

<u>Project/Location</u>	<u>Year Built</u>	<u>Total Sq.Ft.</u>	<u>Vacant Sq.Ft.</u>	<u>Vacancy (in %)</u>	<u>Lease Rates/ Sq.Ft.</u>	<u>Type of Space</u>	<u>Selected Tenants</u>	<u>Competition</u>	<u>Comments</u>
									than doctors and dentists are not affiliated. There are more primary care physicians than specialists in this facility. Typical tenant size is 1,00 square feet though trends are requiring larger spaces. Larger offices can be accommodated if reconfigured. spaces have remained vacant for one month to one year. Very little interest has been expressed in existing vacant space. Asking lease rates have decreased from \$2.45 to \$1.85 per square foot, full service. Amenities include good parking, easy access from Shadelands are of WC, and proximity to JMMC.
Ygnacio Wood Offices 2255 Ygnacio Valley Road	1980	40,000	2,000	5.0%	Medical: \$1.50 Full svc; General: \$1.40 Full svc	60-40%: Medical/ General	NA	None identified	Does not believe that there is much competition since both Doctors Park and Shell Ridge are more expensive. Options available to purchase units. Amenities include excellent visibility, access to YVR, good parking, and broad market appeal since caters to both office and medical users.
1855 San Miguel	NA	29,519	5,611 approx	19.0%	\$1.80 plus util+janitorial	Medical	NA	NA	Space in this building is usually for sale. Sales have been very slow, so space is leased in the interim period. New space recently sold after six years on the market: it was 711 square feet and sold for roughly \$100,000.

SOURCE: City of Walnut Creek; Grubb & Ellis; CB Commercial; TRI Commercial; Bay Area Economics, December 1995.

<sup>1</sup> Individual square footage numbers are approximations by independent property managers. Total derived from City of Walnut Creek database (Walnut Creek City Planning Department).

\$1.00 per square foot, triple net, and reflect a rent structure that is more typical of lower-end, general office buildings.

**b. General Office Market Conditions**

(1) Regional Context. The Walnut Creek office market is a part of the larger I-680 Corridor market which also includes the North I-680 sub-market of Martinez, Pleasant Hill, and Concord; Lamorinda (Lafayette/Moraga/Orinda); Alamo and Danville; and the Tri-Valley Area of San Ramon, Dublin, Pleasanton, and Livermore. In relation to the Bay Area overall, the I-680 corridor can be characterized on a par with the Oakland/Alameda market, less prestigious and expensive than San Francisco, and more recognized and expensive than Solano County.

Within the I-680 market, Walnut Creek contains the only office facilities which can be characterized as having a true "downtown" location. Other distinguishing characteristics include BART proximity and substantial quantities of Class A office space. The Walnut Creek sub-market commands the highest rents in the I-680 corridor, but currently also has the highest vacancy rate (17.9 percent).<sup>1</sup>

(2) Subregional Context. As shown on Table B-2, the Walnut Creek office market can be subdivided into three nodes: Downtown, Pleasant Hill BART, and the Shadelands.

*(a) Downtown.* Buildings in Downtown Walnut Creek feature the most Class A office space and command the highest rents in the Walnut Creek general office market, typically ranging from \$1.80 to \$2.00 per square foot per month, full service. Downtown office buildings tend to be six to ten story mid-rises, and tenants generally pay for parking in garages at a cost of approximately \$25 to 50 per stall per month. In keeping with the urban character of downtown, parking ratios are typically three spaces per 1,000 square feet. In 1994, a corporate headquarters vacated the downtown and added 400,000 square feet of vacant office space to the market. As a result, the October 1995 vacancy rate for the 4.1 million square foot downtown area stood at 12.4 percent, according to Grubb & Ellis.

*(b) Pleasant Hill BART.* This office area includes approximately 900,000 square feet, of which 285,000 square feet are available (including subleases), for a 31.7 percent vacancy rate. Although very high, according to Grubb & Ellis this vacancy rate has decreased five to seven percentage points from a year ago. Lease rates for the Pleasant Hill BART area range from \$1.30 to \$1.80 per square foot, full service.

*(c) Shadelands.* This suburban office area is located on Ygnacio Valley Road approximately 3 miles northwest of JMMC and is generally comprised of Class B, two-story garden-office

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<sup>1</sup>This figure, and other data cited here, is from the third quarter office market report prepared by Grubb & Ellis Research Services Group. Additional office market data discussed in this report are from a survey of medical office buildings conducted in March 1995 by CB Commercial.



Table B-2  
WALNUT CREEK OFFICE MARKET SUMMARY

General <sup>1</sup>			Medical <sup>2</sup>		
	<u>Number</u>	<u>Percent</u>		<u>Number</u>	<u>Percent</u>
Total Square Feet <sup>3</sup>	6,798,450	100.0%	Total Square Feet <sup>3</sup>	386,048	100.0%
Downtown	4,106,873	60.4%	Shell Ridge area <sup>4</sup>	234,328	60.7%
Pleasant Hill BART	894,685	13.2%	Doctors Park	54,359	14.1%
The Shadelands	1,796,892	26.4%	San Miguel Area	97,361	25.2%
Total Vacant Square Feet <sup>3</sup>	1,215,232	17.9%	Total Vacant Square Feet <sup>3</sup>	30,702	8.0%
Downtown	508,858	12.4%	Shell Ridge area <sup>5</sup>	13,955	6.0%
Pleasant Hill BART	283,996	31.7%	Doctors Park	8,240	15.2%
The Shadelands	422,378	23.5%	San Miguel Area	8,507	8.7%
Typical Asking Rent	<u>Class A</u>	<u>Class B</u>	Typical Asking Rent	<u>Class A</u>	<u>Class B</u>
Downtown	\$1.80	\$1.45	Shell Ridge area <sup>5</sup>	\$2.00	\$1.75
Pleasant Hill BART	\$1.80	\$1.30	Doctors Park	\$1.85	\$1.85
The Shadelands	\$1.35	\$1.35	San Miguel Area	\$1.80	\$1.80

SOURCE: City of Walnut Creek; Grubb & Ellis; CB Commercial; Bay Area Economics, 1995.

<sup>1</sup> Grubb & Ellis 3rd Quarter 1995, Office Market Overview.

<sup>2</sup> Doctors Park and San Miguel Area data from CB Commercial Medical/Dental Survey, March 1995.

<sup>3</sup> Includes sublease space.

<sup>4</sup> Includes both JMMC-owned off campus buildings in the Shell Ridge area plus 50 percent of space at San Marcos Office Building 1399 Ygnacio Valley Road). Excludes Walnut Creek Hospital (175-177 La Casa Via).

<sup>5</sup> Same as <sup>4</sup> but all vacant space from San Marcos office building included.

buildings. The Shadelands is considered to be at the lower end of the Walnut Creek general office market. Average asking lease rates are \$1.35 per month, full service. This includes free surface parking at a generous ratio of four spaces per 1,000 square feet of office building. Vacancy rates in the Shadelands area are 23.5 percent including subleases, according to Grubb & Ellis.

(3) Walnut Creek Medical Office Sub-Markets. Medical office buildings are a specialized sub-market of the overall Walnut Creek office market. Based on the inventory of space in the Shell Ridge area, supplemented by data from a March 1995 CB Commercial survey of medical office buildings, it is estimated that approximately 386,000 square feet of medical office space exists in Walnut Creek. This includes all office space used primarily by doctors, dentists, and other health-care professionals. Based on these data, medical office space is equal to about five percent of Walnut Creek's general office market.

Within Walnut Creek, the three primary medical office locations are (a) the Shell Ridge Area, (b) the Doctor's Park Area, and (c) the San Miguel Area. In addition, Kaiser Hospital constitutes a medical node within the Walnut Creek market.

The Shell Ridge area was described in detail at the beginning of this section. The remaining medical office subareas are described below:

*(a) Doctor's Park.* The Doctor's Park Area is located on Ygnacio Valley Road, less than one mile to the northeast of the Shell Ridge area and JMMC. Compared to the Shell Ridge area, the Doctor's Park Area has a larger proportion of dentists, who would not benefit from proximity to JMMC. According to the March 1995 CB Commercial survey, the Doctor's Park Medical Office Area is comprised of nine buildings totaling roughly 54,000 square feet of space. CB Commercial found a total of 8,240 square feet available for lease, for a vacancy rate of 15.2 percent. Based on BAE research conducted in December 1995, asking rents in this area are approximately \$1.85 per square foot, full service.

*(b) San Miguel Area.* The San Miguel Area includes a concentration of older medical office buildings located approximately three miles to the southwest of JMMC in downtown Walnut Creek. According to a real estate broker familiar with the area, the San Miguel Area also includes a large proportion of dentists, who are attracted to the area because of the convenience to downtown and relatively easy freeway access. According to CB Commercial, the San Miguel area contains approximately 97,000 square feet of medical office space, including several buildings located between 1808 and 1911 San Miguel Drive. The March 1995 survey indicated a vacancy rate of 9.0 percent for this area, based on 8,507 square feet available for lease. In December of 1995, an inquiry for this study identified space available in one building in this area, with an asking lease rate of \$1.80 per square foot, not including utilities and janitorial services.

(c) *Kaiser Hospital.* The Kaiser Hospital area in downtown Walnut Creek represents its own node but is not considered to be part of the medical office market, because of Kaiser's status as an owner-user (i.e., Kaiser provides medical office space for its own staff physicians).

#### **c. Planned and Proposed Office and Medical-Related Development Projects**

(1) General Office Projects. According to the Walnut Creek City Planning Department, there are no office developments currently planned or pending approval within the city; however, Contra Costa County has granted approvals for several office buildings in the Pleasant Hill BART Station area. A development called Station Oaks would include a 175,000-square-foot office building, another 125,800-square-foot office building, and a 140,000-square-foot hotel. Contra Costa County approved the development agreement for Station Oaks in 1989, but no development has occurred to date. According to a County Planning Department representative, the development agreement is valid until 2004, and the project developers have not indicated when construction might commence.

Developers are currently in the process of requesting an amendment to the plans for the Urban West project, which is also near the Pleasant Hill BART Station. Originally, this development was to have included four office buildings; however, only one office building has been built. The pending amendment would substitute one additional office building of 120,000 square feet, a health club, and a 175-room hotel in place of the remaining three office buildings that are currently entitled.

(2) Medical Projects. A 197,910-square-foot Kaiser hospital expansion is currently under construction in downtown Walnut Creek. Phase I will be ready for occupancy in the spring of 1996 and Phase II will be ready in the spring of 1999. Development of the Kaiser facility would not be expected to create additional demand for medical office spaces in nodes such as the Shell Ridge area, since Kaiser itself tends to provide its own doctors with office space. Conversely, any office space provided in this facility would not be expected to create direct competition for the tenants who currently occupy existing medical office space in the Shell Ridge area and Walnut Creek's other medical office nodes.

On a larger scale, however, the Kaiser development represents competition for patients between Kaiser and non-HMO facilities such as JMMC. Ultimately, if Kaiser attracts patients that currently use services provided by JMMC, a redistribution of patients could also cause a redistribution of physicians and ancillary health-care staff between the JMMC and its associated physicians in the Shell Ridge area and the Kaiser HMO system in the Downtown Area. This type of shift in patients could impact the demand for both JMMC and Shell Ridge area medical office properties.

#### **d. Overall Position of the Shell Ridge Area Market**

Due probably to its proximity to JMMC, the Shell Ridge area is the strongest of the Walnut Creek medical office market nodes. Buildings in the Shell Ridge area generally command the



highest rents (approximately \$2.00 full service, compared to approximately \$1.85 in other medical office nodes) and have the lowest vacancy rates. The rents for Shell Ridge area medical office buildings are also generally better than the rents paid for class A general office space in the Walnut Creek sub-market.

Of the city's three medical office subareas, the largest number of primary care physicians and specialists can be found at the Shell Ridge area, where convenience to facilities at JMMC appears to have been a primary office location consideration. Property representatives state that Shell Ridge area buildings are very dependent on tenants who have affiliations with JMMC in order to fill their spaces. The exception to this is the San Marco Office Building, which, as indicated earlier, has approximately 50 percent non-medical-related tenants. In addition, a large proportion of the San Marco building's medical-related tenants are less-intensively trained professionals in allied health-care fields, such as chiropractors and various types of therapists, who have less need to maintain a relationship with JMMC.

Among Shell Ridge property managers and representatives interviewed as part of this study, there is general consensus that the Shell Ridge area is a distinct medical office sub-market. Buildings in the area tend to compete primarily with each other for tenants who are affiliated with JMMC, as opposed to competing against buildings in the other nodes. The Doctor's Park and San Miguel Areas were considered to be secondary sources of competition.

Other than the JMMC Master Plan proposal and the downtown Kaiser project, which includes HMO office space in addition to new hospital space, there are no other new medical-related facilities planned or proposed in Walnut Creek. Based on this, there is no sign at this time that activities other than expansion of JMMC would potentially create additional demand for medical office space in the Shell Ridge area or other parts of the city of Walnut Creek.

From the information gathered for this analysis it is clear that Shell Ridge area medical office buildings are currently dependent upon continued demand from the medical professionals affiliated with JMMC as their primary source of demand. If additional medical office space is built in the area, it will compete directly with the existing buildings for tenants. Furthermore, there is not likely to be a net increase in the demand for medical office space in the area unless changes in activities at JMMC create a need for additional physicians and support services; JMMC representatives have stated that in spite of the Master Plan floor area expansion, they foresee no substantial related increase in the number of physicians and office practices in Walnut Creek.<sup>1</sup>

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<sup>1</sup>Written statement from JMMC, January 10, 1996.

## **2. IMPACTS**

### **a. Possible Effects of Master Plan Buildout**

The effect of the JMMC Master Plan on the vacancy and use of buildings in the Shell Ridge area will largely be a function of the proportion of new medical office developed under the terms of the Master Plan. Because the Master Plan would allow JMMC to choose from a range of medical uses, it is not possible to predict with certainty the amount of medical office space which will ultimately be constructed. Therefore, for purposes of this study a "worst case" scenario is assumed in which approximately 70,000 square feet of new medical office uses are constructed by JMMC. This amount reflects the maximum of 72,000 square feet of medical office permitted by the Master Plan at buildout (six percent of 1.2 million square feet), minus the existing 2,000 square feet of medical office uses at the La Casa Court Site. This analysis also assumes other components of the Master Plan building program would not generate sufficient new demand for medical office space to maintain reasonably low vacancy rates in both newly constructed and previously existing medical office buildings.

If JMMC constructs 70,000 square feet of new medical office space on-campus, this would represent a nearly 30 percent increase to the existing 234,000 square foot inventory of medical office space in the Shell Ridge area and could possibly result in an oversupply of medical office space.

### **b. Competitive Position of Existing Medical Office Space in Shell Ridge area**

If new medical office space is built as part of the Master Plan, it is possible that existing Shell Ridge area buildings could have several competitive disadvantages, as follows:

(1) Suite Size. As mentioned earlier, there appears to be a trend toward consolidation of medical practices, which creates a demand for larger contiguous spaces. Conversations with leasing agents indicate that most of the existing buildings in the Shell Ridge area are configured to accommodate smaller suites that average 1,500 square feet, whereas there is increasing demand for spaces of 2,500 square feet or larger. Most property representatives responded negatively when asked if their facilities could be reconfigured to create larger spaces. Only one Shell Ridge area building representative was confident that his building could be reconfigured to provide larger spaces than at present.

(2) Technological Innovations. Newly constructed medical office buildings may also have an advantage in incorporating features to facilitate the use of innovative medical technologies. For example, new buildings would likely be designed to accommodate the telecommunications and electronic equipment needed for tele-medicine, while retrofitting existing buildings with this equipment may prove difficult.

(3) Proximity to JMMC. Convenience to JMMC in-patient and out-patient facilities may also be a competitive factor that works in favor of new on-campus medical office development,

although leasing representatives for the Doctors Park project indicated that some medical office tenants preferred that location to the Shell Ridge area because they wished to be somewhat further away from JMMC. Also, given the good proximity of most Shell Ridge area buildings to existing and proposed JMMC facilities, the comparative benefits of being "on-campus" may not be significant.

(4) Physician-Hospital Relationship. One competitive factor that is not possible to assess at this time is how medical office users' future relationships with JMMC might influence their decisions regarding office locations. If more physicians become JMMC "employees," they may have no choice but to use office space provided by JMMC, and JMMC may prefer to develop and own its own office space instead of leasing space from other property owners. Other relationships between physicians and JMMC might result in an alignment of physician's interests with those of JMMC, which could result in a preference for on-campus medical offices provided by JMMC. JMMC representatives have stated that relocation of primary care practices that are currently dispersed throughout the community "would serve no purpose";<sup>1</sup> however, given the structural changes that the health-care industry is now undergoing, it would be overly speculative to predict how these relationships may actually influence competition in the future market for medical office space.

(5) Lease Terms. It is possible that, in the absence of other competitive advantages, JMMC could develop medical office space and compete aggressively on lease terms which could force owners of existing buildings to take similar actions as current leases expire. In the short term, this may not be significant, because doctors are often reluctant to move to new office space due to the fact that many have substantial investments in tenant improvements in their existing buildings. Leasing representatives indicate that the value of these improvements typically ranges from \$35 to \$45 per square foot, with some as high as \$80 per square foot. In order to be economical, investments of this magnitude must be amortized over long lease periods.

### **c. Physical Suitability in the Shell Ridge Area for Non-JMMC-associated Uses**

If, as a result of on-campus medical office construction at JMMC, an oversupply of space is created in the Shell Ridge area and the demand for off-campus JMMC-related tenants diminishes, the Shell Ridge area would need to capture demand from other users not affiliated with JMMC. A key question is whether the existing building stock would be functional for other types of potential tenants.

(1) Non-JMMC Associated Medical Uses. Because the Shell Ridge buildings are physically configured for medical uses, a shift in the type of medical uses would require only minor building modifications. The Shell Ridge area could compete for the types of tenants not affiliated with JMMC that are found in the Doctor's Park and San Miguel Areas, such as

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<sup>1</sup>Written statement from JMMC, January 10, 1996.



dentists and other allied health professionals. The advantage to this strategy is that the existing buildings would likely be generally compatible with these types of users; however, because the Shell Ridge area represents such a large portion of the Walnut Creek medical office inventory, competition with the two smaller areas for the limited pool of tenants would probably be intense.

(2) General Office Uses. Although general office users represent the largest potential source of demand for existing office space that might become available in the Shell Ridge medical area, significant modifications would be required in most buildings in order to accommodate general office uses. The typical medical office building is purpose-built to accommodate medical suites; including (a) minimal main building lobby areas; (b) individual office suites comprised of a waiting area and a series of relatively small exam rooms stemming from a central hallway; (c) large amounts of plumbing, which might include a sink in each exam room, plus additional facilities for sterilization of instruments, etc., and (d) special HVAC and electrical systems.

In contrast to medical office buildings, general office buildings tend to have larger lobby areas and flexible suites that can accommodate private offices in a range of sizes, plus open work areas that can be laid out using various types of movable partitions. Whereas medical office suites are designed to ensure patient privacy, many general office users want their spaces to facilitate interactions between personnel. To renovate medical office buildings for general office uses would probably involve major expense, and may not be practical. However, if individual suites could be renovated to satisfy general office users, the existing medical office buildings that have adequate space for tenant and patient parking should also have adequate parking space for general office users. In addition, the interior access and circulation patterns that are appropriate for multi-tenant medical office use should also be functional for multi-tenant general office use.

#### d. Market Opportunities for General Office Uses in the Shell Ridge Area

Based on current conditions, the short-term outlook for capturing general office demand in the Shell Ridge area appears poor. According to Grubb & Ellis, the current inventory of vacant office space in the Walnut Creek submarket is 17.9 percent, or 1.2 million square feet. According to data compiled by CB Commercial, during periods of strong real estate demand, the Walnut Creek submarket has been capable of absorbing as much as 300,000 to 500,000 square feet of office space in a year, but in recent years, the absorption has been much more modest.

Even if overall market conditions for general office in Walnut Creek were to improve, it is questionable whether buildings in the Shell Ridge area offered for general office use would be competitive within the larger citywide and regional office markets. This is because the area is isolated from other general office and supporting commercial concentrations and does not have easy freeway accessibility.

Even if the competitive disadvantages could be overcome, based on current market conditions, it is likely that conversion to general office uses could also involve accepting a lower rent structure. If existing buildings were renovated, they would likely be considered class B or C general office properties. Currently, asking rents average approximately \$1.35 to \$1.45 per square foot in Class B buildings, according to Grubb & Ellis. Property owners would need to finance construction costs using proceeds from substantially reduced lease revenues.

### **3. POLICY IMPLICATIONS**

To prevent a possible over-supply of medical office space in the Shell Ridge area, the city of Walnut Creek could establish a formal agreement with JMMC regarding the conditions under which new medical office space may be built as part of the proposed Master Plan. Such an agreement should be worded to ensure that no additional medical office space will be built unless JMMC demonstrates that the existing off-campus medical office facilities are inadequate to meet the need for space to support JMMC's primary mission of delivering health care services.

Permission to build new medical office space could hinge on a demonstration that activities at JMMC will increase the number of physicians and ancillary services, such as labs, that require medical office space on or near the JMMC campus, and that existing medical office facilities are not adequate to accommodate the projected demand. However, even if the overall demand for medical office space remains steady, the city and JMMC should be alert to the possibility that in the future some existing space may become functionally obsolete, at which timely replacement with new space could be appropriate.

## APPENDIX C

### SUPPLEMENTAL AIR QUALITY INFORMATION





## APPENDIX : AIR QUALITY METHODOLOGY AND ASSUMPTIONS

### CALINE-4 MODELING

The CALINE-4 model is a fourth-generation line source air quality model that is based on the Gaussian diffusion equation and employs a mixing zone concept to characterize pollutant dispersion over the roadway.<sup>1</sup> Given source strength, meteorology, site geometry and site characteristics, the model predicts pollutant concentrations for receptors located within 150 meters of the roadway. The CALINE-4 model allows roadways to be broken into multiple links that can vary in traffic volume, emission rates, height, width, etc..

The intersection mode of the model was employed, which distributes emissions along each leg of the intersection for free-flow traffic, idling traffic and accelerating and decelerating traffic. The intersection model extended 500 meters in all directions. Receptors (locations where the model calculates concentrations) were located at distance of 20 feet from the roadway edge for all four corners of the intersection and at locations 50 feet in either direction, for a total of 12 receptors. Figure 1 is a schematic diagram showing the location of receptors.

The worst case mode of the CALINE-4 model was employed. In this mode the wind direction is varied to determine which wind direction results in the highest concentration for each receptor. Emission factors were derived from the California Air Resources Board EMFAC-7F model. Adjustments were made for vehicle mix and hot start/ cold start/ hot stabilized percentages appropriate to each roadway. Temperature was assumed to be 40 degrees F.

The computation of carbon monoxide levels assumed the following worst-case meteorological conditions:

Windspeed: 1 mps  
Stability: F Category  
Mixing Height: 1000 meters  
Surface Roughness: 100 cm  
Standard Deviation of Wind Direction: 10 degrees

The CALINE-4 model calculates the local contribution of nearby roads to the total concentration. The other contribution is the background level attributed to more distant traffic. The assumed background levels were 7.8 PPM for the 1-hour averaged period and 3.5 PPM for the 8-hour averaging period for the 1996 analysis year. The assumed background levels were 5.2 PPM for the 1-hour averaged

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<sup>1</sup> California Department of Transportation, CALINE-4- A Dispersion Model for Predicting Air Pollutant Concentrations Near Roadways, Report No. FHWA/CA/TL-84-15, 1984.

period and 2.3 PPM for the 8-hour averaging period for the 2010 analysis year. These background concentrations were developed using carbon monoxide background levels and correction factors for future years developed by the BAAQMD. To generate estimates of 8-hour concentrations from the 1-hour CALINE results a persistence factor of 0.70 was employed.

#### **URBEMIS-5**

Estimates of regional emissions generated by project traffic were made using a program called URBEMIS-5.<sup>2</sup> URBEMIS-5 is a program which estimate the emissions that result from various land use development projects. Land use project can include residential uses such as single-family dwelling units, apartments and condominiums, and nonresidential uses such as shopping centers, office buildings, and industrial parks. URBEMIS-5 contains default values for much of the information needed to calculate emissions. However, project-specific, user-supplied information can also be used when it is available.

Inputs to the URBEMIS-5 program include trip generation rates, vehicle mix, average trip length by trip type and average speed. Trip generation rates for project land uses and land uses removed by the project were provided by the project transportation consultant. Average trip lengths and vehicle mix for the Bay Area Air Basin were used. Average speed for all types of trips was assumed to be 25 MPH.

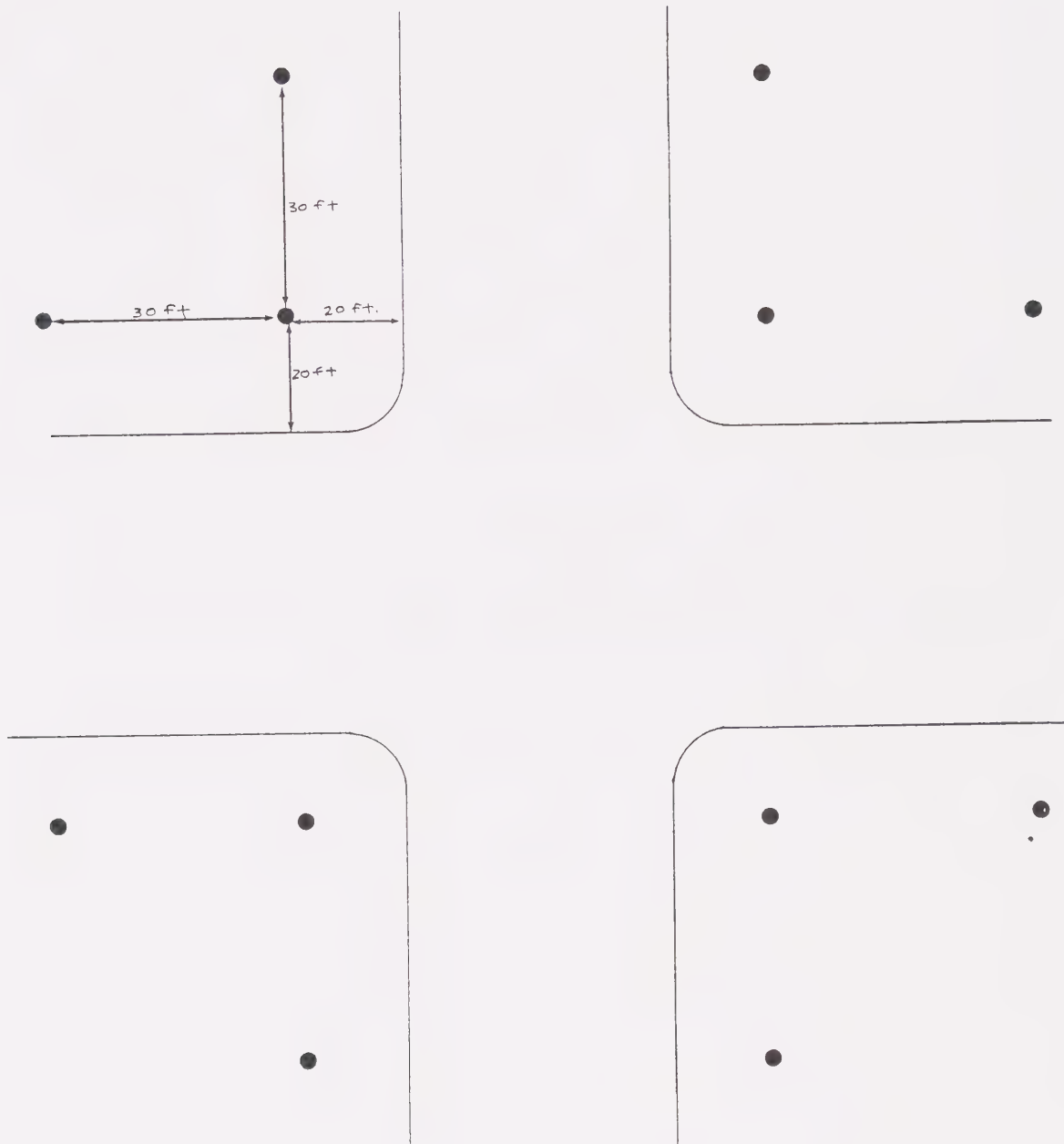
The URBEMIS-5 runs assumed summertime conditions. Default values for cold-start percentages were used. The URBEMIS-5 program provides emission rates for Total Organic Gases (TOG). The TOG emission was multiplied by 0.914 to estimate Reactive Organic Gases (ROG).

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<sup>2</sup> California Air Resources Board, URBEMIS-5 Computer Program Version 5.0 User Guide, July 1995.



Figure 1: Location of CALINE-4 Receptors





## APPENDIX D

### SUPPLEMENTAL VEGETATION AND WILDLIFE INFORMATION





Table 1. Sensitive plants potentially in southwestern Solano County

PLANT TAXON	COMMON NAME	LIST	R-E-D	FWS	CDFG	HABITAT	Likely In Study Area ?
SPECIES OF PRIMARY CONCERN:							
<i>Eriogonum truncatum</i>	Mt. Diablo buckwheat	1a	P.E. 1940	C3a	-	dry slopes, edge of chaparral	No; no suitable habitat; none seen
<i>Eschscholzia rhombipetala</i>	diamond - petaled Calif. poppy	1a	PE 1950	C2	-	dry flats, brushy slopes ?	No; poor habitat quality; extirpated in Co.?
<i>Tropidocarpum capparideum</i>	caper fruited tropidocarpum	1a	P.E. 1957	C2*	-	low alkaline hills & plains; Mt. Diablo region	No; no good habitat; extinct?
<i>Amsinckia grandiflora</i>	large- flowered fiddleneck	1b	3 - 3 - 3	E	E	open grassy slopes; valley grassland	No; no good habitat
<i>Arctostaphylos auriculata</i>	Mt. Diablo manzanita	1b	3 - 1 - 3	C3c	-	dry slopes of sandstone; chaparral	No; no suitable habitat; none present
<i>Arctostaphylos manzanita</i> ssp. <i>laevigata</i>	Contra Costa manzanita	1b	3 - 2 - 3	-	-	chaparral, rocky places on Mt. Diablo	No; no suitable habitat; none present
<i>Arctostaphylos pallida</i>	Alameda manzanita	1b	3 - 3 - 3	C1	E	chaparral, East Bay hills	No; no suitable habitat; none present
<i>Astragalus tener</i> var. <i>tener</i>	alkali milk-vetch	1b	3 - 2 - 3	-	-	clay playas, alkaline flats and swales	No; no suitable habitat; extirpated in Co.?
<i>Atriplex cordulata</i>	heartscale	1b	2 - 2 - 3	C2	-	saline/alkaline grassland & scrub; sandy	No; no suitable habitat; extirpated in Co.?
<i>Atriplex depressa</i>	brittlescale	1b	2 - 2 - 3	-	-	saline/alkaline grassland & scrub; clay	No; no suitable habitat; none seen
<i>Atriplex joaquiniana</i>	San Joaquin spearscale	1b	2 - 2 - 3	C2	-	saline/alkaline meadow, grassland, marsh	No; no suitable habitat; none seen
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	big-scale balsamroot	1b	2 - 2 - 3	-	-	oak woodland edges and clearings,	No; poor habitat quality
<i>Blepharizonia plumosa</i> ssp. <i>plumosa</i>	big tarplant	1b	3 - 3 - 3	-	-	valley grassland	No; no suitable habitat; none seen
<i>Calochortus pulchellus</i>	Mt. Diablo fairy lantern	1b	2 - 2 - 3	-	-	wooded, brushy slopes	No; no good habitat
<i>Cordylanthus nidularius</i>	procumbent cordylanthus (bird's-beak)	1b	3 - 3 - 3	C1	R	rocky places, serpentine slopes	No; no suitable habitat; none seen
<i>Delphinium californicum</i> ssp. <i>interius</i>	Hospital Canyon larkspur	1b	3 - 2 - 3	C2	-	wet grassy places, oak woodland	No; no good habitat
<i>Delphinium recurvatum</i>	recurved larkspur	1b	1 - 2 - 3	C2	-	valley sink, scrub, grassland	No; no good habitat

Table 1. Sensitive plants potentially in southwestern Solano County

PLANT TAXON	COMMON NAME	LIST	R-E-D	FWS	CDFG	HABITAT	Likely In Study Area ?
<i>Dirca occidentalis</i>	western leatherwood	1b	2 - 2 - 3	-	-	wet rocky hills, coast. decid. forest, chaparral	No; no suitable habitat; none present
<i>Fritillaria liliacea</i>	fragrant fritillary	1b	1 - 2 - 3	C2	-	heavy adobe soils, coastal grassland and	No; no good habitat
<i>Helianthella castanea</i>	Diablo helianthella	1b	3 - 2 - 3	C2	-	grassy hillsides, oak woodland	No; poor habitat quality; none seen
<i>Hemizonia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant	1b	3 - 3 - 3	C1	-	saline/alkaline grassland	No; no suitable habitat; none present
<i>Hesperolinon breweri</i>	Brewer's dwarf flax	1b	2 - 2 - 3	C2	-	grassy, brushy slopes; chaparral	No; no suitable habitat
<i>Holocarpha macradenia</i>	Santa Cruz tarplant	1b	2 - 3 - 3	C1	E	heavy soils, coastal grassland	No; no good habitat; none present
<i>Isocoma arguta</i>	Carquinez goldenbush	1b	3 - 3 - 3	C2	-	valley grassland; saline/alkaline	No; no good habitat; none present
<i>Juglans californica</i> var. <i>hindsii</i>	No. Calif. black walnut	1b	3 - 3 - 3	C2	-	old Indian campsites, valley riparian	No; no specimens that meet criteria
<i>Lasthenia conjugens</i>	Contra Costa goldfields	1b	3 - 3 - 3	C1	-	vernal pools; valley grassland	No; no suitable habitat
<i>Madia radiata</i>	showy madia	1b	2 - 3 - 3	-	-	foothill woodland, valley grassland	No; poor habitat quality; disced, cultivated
<i>Malacothamnus hallii</i>	Hall's bush mallow	1b	3 - 2 - 3	-	-	stony slopes, chaparral	No; no suitable habitat; none seen
<i>Monardella villosa</i> ssp. <i>globosa</i>	robust monardella	1b	3 - 2 - 3	-	-	foothill woodland, clearings in chaparral	No; no good habitat; none seen
<i>Phacelia phacelioides</i>	Mt. Diablo phacelia	1b	2 - 2 - 3	C2	-	chaparral, foothill woodland	No; no good habitat; none seen
<i>Sanicula saxatilis</i>	rock sanicle	1b	3 - 2 - 3	C2	R	chaparral, foothill woodland	No; no good habitat; none seen
<i>Streptanthus hispidus</i>	Mt. Diablo jewelflower	1b	3 - 1 - 3	C2	-	talus, rock outcrops, rocky grassland	No; no good habitat; none seen
<i>Trifolium amoenum</i>	showy Indian clover	1b	3 - 3 - 3	C2*	-	low rich fields, swales; serpentine	No; poor habitat quality; no good habitat; disced



Table 1. Sensitive plants potentially in southwestern Solano County

PLANT TAXON	COMMON NAME	LIST	R-E-D	FWS	CDFG	HABITAT	Likely In Study Area ?
SPECIES OF SECONDARY CONCERN:							
<i>Senecio aphanactis</i>	rayless ragwort	2	3 - 2 - 1	-	-	woodland, scrub; alkaline	No; no suitable habitat; none seen
<i>Eriogonum luteolum</i> var. <i>caninum</i>	Tiburon buckwheat	3	? - 2 - 3	C3c	-	dry rocky slopes; shale and serpentine	No; no suitable habitat; none seen
<i>Lessingia hololeuca</i>	woolly-headed lessingia	3	? - ? - 3	-	-	grassland, barrens, scrub; serpentine, clay	No; no suitable habitat; none seen
<i>Monardella antonina</i> ssp. <i>antonina</i>	San Antonio Hills monardella	3	? - ? - 3	C3c	-	foothill woodland, chaparral	No; no suitable habitat; none seen
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mousetail	3	2 - 3 - 2	C2	-	vernal pools; alkaline	No; no suitable habitat
<i>Amsinckia lunaris</i>	bent- flowered fiddleneck	4	1 - 1 - 3	-	-	valley and foothill grassland	No; poor habitat quality; disced
<i>Androsace elongata</i> ssp. <i>acuta</i>	California androsace	4	1 - 2 - 2	-	-	chaparral, woodland, coastal scrub	No; no suitable habitat
<i>Calandrinia breweri</i>	Brewer's calandrinia	4	1 - 2 - 2	-	-	chaparral, coastal scrub; burns	No; no suitable habitat
<i>Calochortus umbellatus</i>	Oakland star tulip	4	1 - 2 - 3	-	-	dry wooded or barren hills; serpentine;	No; no suitable habitat
<i>Campanula exigua</i>	chaparral harebell	4	1 - 1 - 3	-	-	talus, chaparral	No; no suitable habitat
<i>Collomia diversifolia</i>	serpentine collomia	4	1 - 1 - 3	-	-	chaparral, woodland, barren; serpentine	No; no suitable habitat
<i>Convolvulus simulans</i>	small-flowered morning-glory	4	1 - 2 - 2	-	-	clay, serpentine seep	No; no suitable habitat
<i>Cryptantha hooveri</i>	Hoover's cryptantha	4	1 - 2 - 3			valley grassland, rocky outcrops; sandy, rocky	No; no suitable habitat
<i>Eriophyllum jepsonii</i>	Jepson's eriophyllum	4	1 - 1 - 3	-	-	dry rocky slopes, serpentine, coastal scrub	No; no suitable habitat; none seen
<i>Fritillaria agrestis</i>	stinkbells	4	1 - 2 - 3	C3c	-	low heavy soil, valley grassland, woodland; serp.	No; no suitable habitat
<i>Micropus amphibolus</i>	Mt. Diablo cottonweed	4	1 - 1 - 3	-	-	foothill woodland, upland forest, rocky grassland	No; no suitable habitat
<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	Gairdner's yampah	4	1 - 2 - 3	C2	-	moist places, marshes, woodland	No; no suitable habitat; no wetlands

Table 1. Sensitive plants potentially in southwestern Solano County

PLANT TAXON	COMMON NAME	LIST	R-E-D	FWS	CDFG	HABITAT	Likely In Study Area ?
<i>Ranunculus lobbii</i>	Lobb's aquatic buttercup	4	1 - 2 - 3	-	-	shallow vernal ponds & pools	No; no suitable habitat; no wetlands
OTHER SPECIES OF POSSIBLE CONCERN:							
<i>Gutierrezia californica</i>	California snakeweed	-	dropped	-	-	dry hills and plains	No; no suitable habitat; none seen
<i>Quercus lobata</i>	valley oak	-	dropped	-	-	foothill & valley woodland, riparian	Yes, scattered individuals, but no longer listed

## LEGEND FOR TABLE 1

**Plant Taxon:** as listed by Skinner, M.W., and B. M. Pavlik, ed.s (1994).

**List:** Refers to the list number on which the plant is included in Skinner and Pavlik, Ed.s (1994): California Native Plant Society's sensitive plant inventory. **1a:** Plants presumed extinct, **1b:** Plants rare or endangered in California and elsewhere, **2:** Plants rare or endangered in California, but more common elsewhere, **3:** Plants about which we need more information, and **4:** Plants of limited distribution [a watch list]. Appendix 1: plants considered, but not included.

**R-E-D:** rarity (R), endangerment (E), and distribution (D) code from Skinner, M.W., Ed. (1994) :

Rarity :

- 1 = Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time.
- 2 = Occurrence confined to several or one extended population(s).
- 3 = Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom seen.

**PE** = Presumed extinct in California (with date last seen)

Endangerment :

- 1 = Not endangered.
- 2 = Endangered in a portion of its range.
- 3 = Endangered throughout its range.

Distribution :

- 1 = More or less widespread outside California.
- 2 = Rare outside California.
- 3 = Endemic to California.

**FWS:** C1 = A candidate taxon, Category 1: information sufficient for federal listing by FWS (1985). C2 = Also a candidate, Category 2: information insufficient for formal proposal for listing. C3c = Previously considered, but currently considered to be too common for listing. \* = presumed extinct.

**CDFG:** E = Endangered, R = Rare, T = Threatened; as designated by CDFG (1992).

**Habitat, Elevation, Flowering Period:** As reported in Munz and Keck (1959), Munz (1968), Skinner and Pavlik, ed.s (1994), Hickman, J.C., Ed. 1993, and/or Abrams and Ferris (1923 - 1951).

Table 2. Sensitive wildlife species potentially in the greater Walnut Creek region

Wildlife Species	Status	Habitat	Likely In Study Area ?
<b>BIRDS</b>			
Agelaius tricolor (tricolored blackbird)	CA: csc; FED: C2	nests in cattails, blackberry etc. near perennial streams and/or marshes	NO; no suitable habitat onsite or nearby
Ardea herodias (Great blue heron)	CA: -; FED: -	major wetlands, sloughs, creeks, shallow lakes, ditches	NO; no suitable habitat onsite or nearby
Asio flammeus (short-eared owl)	CA: csc; FED: -	fresh, brackish, and saltwater marshes, lowland meadows, grassland	NO; no suitable habitat onsite or nearby
Asio otus (long-eared owl)	CA: csc; FED: -	hunts in open grasslands, meadows, fields; nests in thickets and woodlands	NO; no suitable habitat onsite or nearby
Casmerodius albus (Great egret)	CA: -; FED: -	major wetlands, sloughs, creeks, shallow lakes, ditches	NO; no suitable habitat onsite or nearby
Circus cyaneus (Northern harrier)	CA: csc; FED: -	meadows, marshes, grasslands, open fields	NO; poor habitat quality; may occas. forage through area
Egretta thula (snowy egret)	CA:-; FED: -	nests in groves of trees near wetlands with fish and/or suitable food base	NO; no suitable habitat onsite or nearby
Elanus caeruleus (Black-shouldered kite)	CA: FP; FED: -	meadows, marshes, grasslands, open fields	NO; poor habitat quality; may occas. forage through area
Eremophila alpestris actia (California horned lark)	CA: -; FED: C2	many grassland and woodland habitats	NO; no good habitat onsite; may pass thru area on occasion
Speotyto cunicularia (Burrowing owl)	CA: csc; FED: -	creekbanks, low hills, grasslands	NO; no suitable habitat; none seen; no sig. burrows
<b>MAMMALS</b>			
Plecotus townsendii townsendii (Townsend's western big-eared bat)	CA: csc; FED: C2	many habitats; needs caves, mines, or old buildings for roosting	NO; no significant resources onsite; no suitable roosting sites
Taxidea taxus (American badger)	CA: csc; FED: -	oak savanna, grassland	NO; too urban; no sig. resources onsite; no evidence, no burrows
<b>REPTILES AND AMPHIBIANS</b>			
Ambystoma californiense (California tiger salamander)	CA: csc; FED: FPE	vernal pools, seasonal ponds, isolated ponds & small lakes	NO; no suitable habitat onsite or nearby; no evident burrows
Masticophis lateralis euryxanthus (Alameda whipsnake)	CA: T; FED: FPE	coastal scrub & chaparral	NO; no suitable habitat onsite; no scrub vegetation





## **APPENDIX E:**

### **CEQA STANDARDS FOR EIR ADEQUACY**

**According to Section 15151 of the CEQA Guidelines, the standards for Adequacy of an EIR are as follows:**

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.





**APPENDIX F:**  
**CEQA DEFINITION OF "MITIGATION"**

**According to Section 15370 of the CEQA EIR Guidelines, the term "mitigation" includes:**

- (a) Avoiding the impact altogether by not taking a certain action or parts of an action.
- (b) Minimizing impacts by limiting the degree of magnitude of the action and its implementation.
- (c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment.
- (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- (e) Compensating for the impacts by replacing or providing substitute resources or environments.



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## APPENDIX G. EIR CONSULTANT TEAM

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